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Metallic Ventures Gold Inc.

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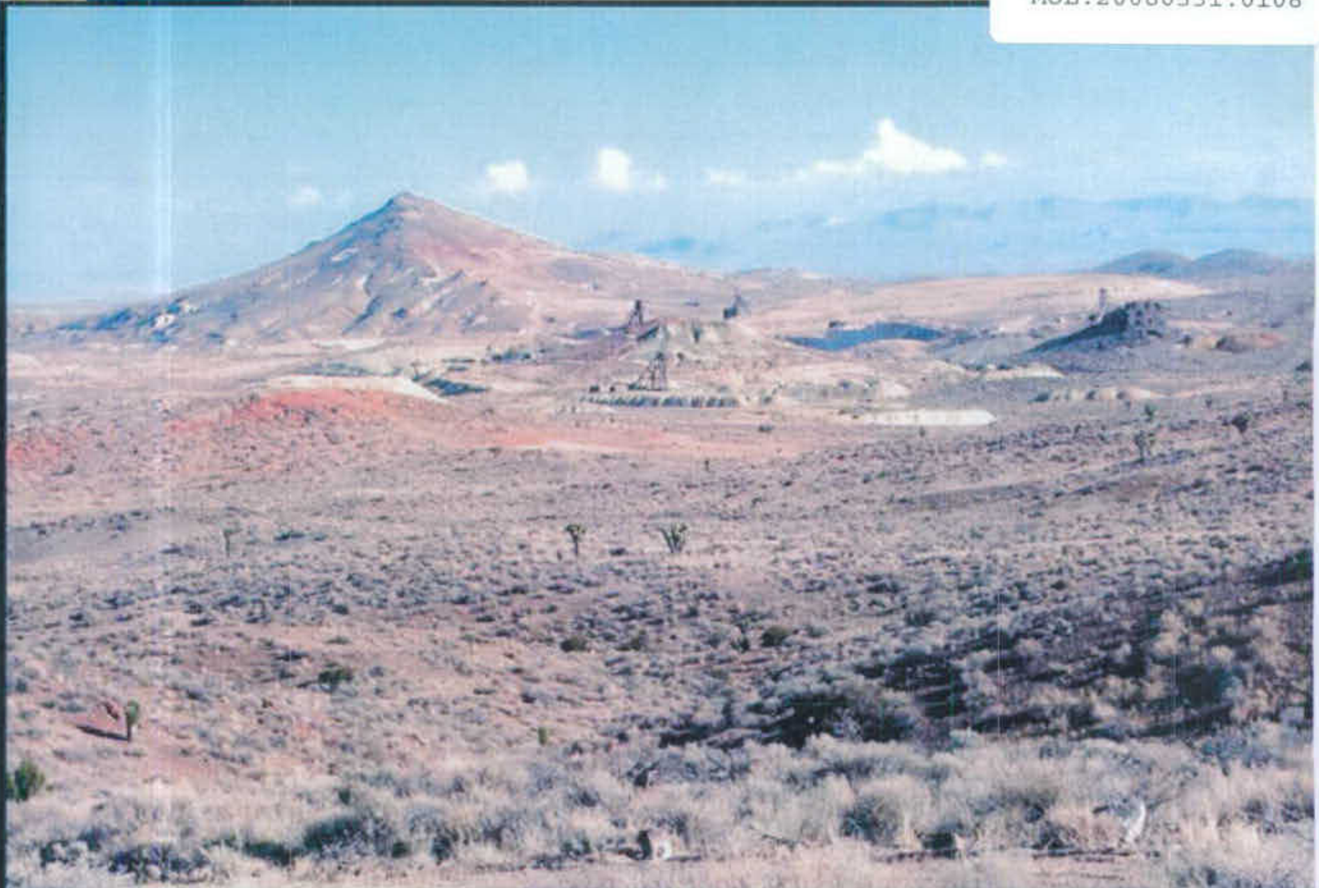

Preliminary Assessment

Gemfield and McMahon Ridge Deposits
Goldfield District, Nevada

Effective Date: 25 September 2006

Prepared By:
Gordon E. Seibel, MAusIMM
Scott D. Long, MAusIMM
Brian D. Kennedy, P.Eng.
Timothy J. Carew, P.Geo.

amec

IMPORTANT NOTICE

Recognizing that Metallic Ventures Gold Inc. has legal and regulatory obligations in a number of global jurisdictions, AMEC E&C Services Inc. (AMEC) consents to the filing of this report with any stock exchange and other regulatory authority and any publication by Metallic Ventures Gold Inc., including electronic publication on Metallic Venture Gold Inc.'s website accessible by the public, of this report.

This report was prepared as a National Instrument 43-101 Technical Report, in accordance with Form 43-101F1, for Metallic Ventures Gold Inc. by AMEC. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended to be used by Metallic Ventures Gold Inc., subject to the terms and conditions of its contract with AMEC. That contract permits Metallic Ventures Gold Inc. to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report by any third party is at that party's sole risk.

CERTIFICATE OF QUALIFIED PERSON

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I, Gordon E. Seibel, MAusIMM am a Principal Geologist with AMEC E&C Services Inc., located at 780 Vista Boulevard, Suite 100, Sparks, Nevada 89434 USA. I have been employed by AMEC E&C Services Inc. since February 2005.

I am a member of the Australasian Institute of Mining & Metallurgy (AusIMM). I graduated with a Bachelor of Arts degree in Geology from the University of Colorado in 1980 and a Masters of Science degree in Geology from Colorado State University in 1991.

I have practiced my profession as a geologist continuously for over 26 years in operations and consulting and have been involved in geology and resource estimation at gold operations in Colorado and Nevada. I have worked for FMC Gold (1988-1989), AngloGold (1990-2004) and AMEC E&C Services Inc. (2005-present).

As the result of my education and experience I am a Qualified Person as defined in National Instrument 43-101.

I am responsible for preparation of Sections 1 to 10, 15, 17, 19.1 and 20 to 21 of the Technical Report titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September, 2006. I visited the property on November 28 and 29, 2005 and the offices of Metallic Ventures Gold Inc. on November 30 and December 1, 2005, where I reviewed the geology, mineralization, drilling practices and resource estimates for the Gemfield and McMahon Ridge deposits.

I have had no other prior involvement with the property that is the subject of the Technical Report.

I certify that, to the best of my personal knowledge, information and belief, that the technical report contains all scientific and technical information required to be disclosed to make the report not misleading.

I am independent of Metallic Ventures Gold Inc. in accordance with the application of Section 1.5 of National Instrument 43-101.

I have read National Instrument 43-101 and certify that the Technical Report has been prepared in compliance with that Instrument. I further certify that, as of the date of this certificate, the Technical Report contains all of the information required under Form 43-101F1 in respect of the property that is the subject of the report.

Dated at Sparks, Nevada this 25th day of September 2006.

"Signed and Sealed"

Gordon E. Seibel, MAusIMM

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I, Scott D. Long, MAusIMM am a Chief Geochemist with AMEC E&C Services Inc., located at 2001 W. Camelback Road, Suite 300, Phoenix, Arizona 85015. I have been employed by AMEC E&C Services Inc. since 1994.

I am a member of the Australasian Institute of Mining & Metallurgy (AusIMM). I graduated with a Bachelor of Science degree in Chemistry from the University of Washingon and a Masters of Science degree in Geochemistry from the New Mexico Institute of Mining and Technology.

I have practiced my profession as a geochemist continuously for over 22 years in operations and consulting and have been involved in the auditing of drilling, sample preparation, assaying, quality assurance/quality control and database validations for advanced projects in Canada, the United States, Peru, Chile, Brazil, Australia, Indonesia, Kazakhstan, Venezuela, Myanmar, Zambia, Ghana and Niger. I have worked for Newmont Gold (1984-1993) and AMEC E&C Services Inc. (1994-present).

As the result of my education and experience I am a Qualified Person as defined in National Instrument 43-101.

I am responsible for preparation of Sections 11-14 of the Technical Report titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September, 2006. I visited the offices of Metallic Ventures Gold Inc. in Reno, Nevada on June 26 to 30, 2006 and audited exploration databases for the Gemfield and McMahon Ridge deposits, containing drilling up to December 2005. I also reviewed historical assay quality assurance and quality control data and assessed the quality of assays used in resource estimates.

I have had no other prior involvement with the property that is the subject of the Technical Report.

I certify that, to the best of my personal knowledge, information and belief, that the technical report contains all scientific and technical information required to be disclosed to make the report not misleading.

I am independent of Metallic Ventures Gold Inc. in accordance with the application of Section 1.5 of National Instrument 43-101.

I have read National Instrument 43-101 and certify that the Technical Report has been prepared in compliance with that Instrument. I further certify that, as of the date of this certificate, the Technical Report contains all of the information required under Form 43-101F1 in respect of the property that is the subject of the report.

Dated at Phoenix, Arizona this 25th day of September 2006.

"Signed and Sealed"

Scott D. Long, MAusIMM

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I, Brian D. Kennedy, P.Eng. am a Professional Engineer and Senior Metallurgical Engineer with AMEC E&C Services Inc., located at 2001 West Camelback road, Suite 300, Phoenix, Arizona, USA, 85015. I have been employed by AMEC E&C Services Inc. since 1997.

I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia. I graduated with a Bachelor of Applied Science degree in Metallurgical Engineering from the University of British Columbia in 1985.

I have practiced my profession as a consulting engineer continuously for over 19 years and have been involved in project evaluations and feasibility studies for gold, nickel and copper deposits in Canada, the United States, Peru, Chile, South Africa, Australia, Papua New Guinea and China. I have worked for Fluor Daniel Wright, Ltd. (1987-1996), Rescan Engineering, Ltd. (1996-1997), and AMEC E&C Services Inc. (1997-present).

As the result of my education and experience I am a Qualified Person as defined in National Instrument 43-101.

I am responsible for preparation of Sections 16, 18.3 and 19.2 of the Technical Report titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September, 2006. I visited the offices of Metallic Ventures Gold Inc. on November 30 and December 1, 2005, where I reviewed material pertinent to the metallurgical testing of gold and silver mineralization at the Gemfield and McMahon Ridge deposits. I have not visited the property.

I have had no other prior involvement with the property that is the subject of the Technical Report.

I certify that, to the best of my personal knowledge, information and belief, that the technical report contains all scientific and technical information required to be disclosed to make the report not misleading.

I am independent of Metallic Ventures Gold Inc. in accordance with the application of Section 1.5 of National Instrument 43-101.

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Dated at Phoenix, Arizona, this 25th day of September 2006.

"Signed and Sealed"

Brian D. Kennedy, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Timothy J. Carew
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I, Timothy J. Carew, P.Geo, CEng. am the Principal of Reserva International LLC, located at 12955 Fieldcreek Lane, Reno, Nevada 89511.

I am a member of the Association of Professional Engineers & Geoscientists of British Columbia, Canada and I am a Chartered Engineer of the Institute of Materials, Minerals and Mining, UK. I graduated with a Bachelor of Science degree in Geology (Honors) from the University of Rhodesia in 1973, a Bachelor of Science degree in Geology (Special Honors) in 1976 and a Masters of Science degree in Mineral Production Management from the University of London, Royal School of Mines in 1981.

I have practiced my profession in geology and mine engineering continuously for over 31 years in operations and consulting and have been involved in mine designs, production planning, resource and reserve estimation and strategic planning at asbestos, copper, gold, molybdenum and bauxite operations in Canada, the United States, Zimbabwe, the Caribbean, Ghana, Australia, Jamaica, and the CIS. I have worked for Shabanie and Mashaba Mines (Pvt.) Ltd., Brinco Mining Ltd., Cassiar Mining Corporation, Princeton Mining Corporation, and Gemcom.

As the result of my education and experience I am a Qualified Person as defined in National Instrument 43-101.

I am responsible for preparation of Section 18 and 19.3 of the Technical Report titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September, 2006. I have not visited the property.

I have had no other prior involvement with the property that is the subject of the Technical Report.

I certify that, to the best of my personal knowledge, information and belief, that the technical report contains all scientific and technical information required to be disclosed to make the report not misleading.

I am independent of Metallic Ventures Gold Inc. in accordance with the application of Section 1.5 of National Instrument 43-101.

I have read National Instrument 43-101 and certify that the Technical Report has been prepared in compliance with that Instrument. I further certify that, as of the date of this certificate, the Technical Report contains all of the information required under Form 43-101F1 in respect of the property that is the subject of the report.

Dated at Reno, Nevada this 25th day of September 2006.

"Signed and Sealed"

Timothy J. Carew P.Geo.

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CONSENT of AUTHOR

TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilieres du Quebec
Nunavut Legal Registry
Officer of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

AND TO: Metallic Ventures Gold Inc.

Pursuant to Section 8.3 of the National Instrument 43-101, I, Gordon E. Seibel, do hereby consent to the filing of the technical report prepared for Metallic Ventures Gold Inc. titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September 2006 (the "Technical Report") with the securities regulatory authorities referred to above.

I further consent (a) to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, and (b) to the publication of the Technical Report by Metallic Ventures Gold Inc. on its company website or otherwise.

I confirm that I have read the news release referencing the results of the Goldfield Project Preliminary Assessment Report, dated 25 September 2006, and this disclosure fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 25th day of September 2006.

"Signed and Sealed"

Gordon E. Seibel MAusIMM

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CONSENT of AUTHOR

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Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilieres du Quebec
Nunavut Legal Registry
Officer of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

AND TO: Metallic Ventures Gold Inc.

Pursuant to Section 8.3 of National Instrument 43-101, I, Scott Long, do hereby consent to the filing of the technical report prepared for Metallic Ventures Gold Inc. titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September 2006 (the "Technical Report") with the securities regulatory authorities referred to above.

I further consent (a) to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, and (b) to the publication of the Technical Report by Metallic Ventures Gold Inc. on its company website or otherwise.

I confirm that I have read the news release referencing the results of the Goldfield Project Preliminary Assessment Report, dated 25 September 2006, and this disclosure fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 25th day of September 2006.

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Commission des valeurs mobilieres du Quebec
Nunavut Legal Registry
Officer of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

AND TO: Metallic Ventures Gold Inc.

Pursuant to Section 8.3 of the National Instrument 43-101, I, Brian D. Kennedy, do hereby consent to the filing of the technical report prepared for Metallic Ventures Gold Inc. titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September 2006 (the "Technical Report") with the securities regulatory authorities referred to above.

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I confirm that I have read the news release referencing the results of the Goldfield Project Preliminary Assessment Report, dated 25 September 2006, and this disclosure fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 25th day of September 2006.

"Signed and Sealed"

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CONSENT of AUTHOR

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Officer of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

AND TO: Metallic Ventures Gold Inc.

Pursuant to Section 8.3 of National Instrument 43-101, I, Timothy J. Carew, do hereby consent to the filing of the technical report prepared for Metallic Ventures Gold Inc. titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada* and dated 25 September 2006 (the "Technical Report") with the securities regulatory authorities referred to above.

I further consent (a) to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, and (b) to the publication of the Technical Report by Metallic Ventures Gold Inc. on its company website or otherwise.

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Dated this 25th day of September 2006.

"Signed and Sealed"

Timothy J. Carew, P.Geo.

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1.0 SUMMARY

1.1 Introduction

Metallic Ventures Gold Inc. (MVG) commissioned AMEC E&C Services, Inc. (AMEC) to conduct the following work on the Gemfield and McMahon Ridge gold deposits within the Goldfield Project, Esmeralda County, Nevada, to include the following: a review of project exploration data, geological models, resource estimates, scoping-level determination of mining and processing operating costs, preliminary pit designs, assessments of mining rates, review of metallurgy and process options. Recommendations are provided regarding areas of opportunities for addition of resources, mining options and process options. Recommendations are also provided for work necessary to proceed to a prefeasibilty level of project design. Although much of the discussion in this report includes the Goldfield Main district, the gold resources there (as reported by Mine Development Associates, 2002) are not included in this analysis since the focus of this report is on the Gemfield and McMahon Ridge Deposits. AMEC verified that exploration data are of suitable quality to support preparation of resource estimates. Assistance was also provided in preparing resource estimates to ensure the estimates were acceptable for mine designs and compliant with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves (2000), CIM Definition Standards for Mineral Resources and Mineral Reserves (2000) and Canadian National Instrument 43–101 of the Canadian Securities Administrators. The format and content of the report are intended to conform to Form 43-101F1. The effective date of this report is 25 September 2006.

Gordon Seibel, (M.AusIMM), Brian Kennedy, (P.Eng (B.C.)), and Scott Long, (M.AusIMM), employees of AMEC, and Timothy Carew, (P.Geo. (B.C).and C.Eng (UK)) Associate Geological Engineer of AMEC, served as Qualified Persons in preparation of this report.

Gordon Seibel and Brian Kennedy visited the property on November 28 and 29, 2005 and reviewed the geology, exploration data, drilling practices and project development concepts.

Scott Long visited MVG's Reno, Nevada office on June 26 to 30, 2006 and audited exploration databases, containing drilling up to December 2005. Mr. Long also reviewed historical assay quality assurance and quality control data and assessed the quality of assays used in resource estimates.

Timothy Carew developed open pit mine designs, production plans and operating costs by factoring costs from comparable operations. Brian Kennedy developed heap leach facility designs and process operating costs, from first principles.

Unless stated otherwise, all quantities are in metric units and all currencies are presented in constant 2006 US dollars.

1.2 Property Description

The Goldfield property (the "Property") straddles the boundary between Esmeralda and Nye Counties, and is immediately adjacent to the historic mining town of Goldfield, Nevada. US Highway 95, the main route from Reno to Las Vegas, cuts across the western portion of the property. The Gemfield deposit, within the Property, is entirely concealed beneath alluvium and a portion of this deposit is beneath the highway. The McMahon Ridge deposit, with an outcrop width of 76 m (250 ft), is located toward the western portion of the Property.

The Property is situated in the sparsely vegetated, high desert region of the Basin and Range physiographic province, at elevations ranging from 1,650 to 2,100 m (5,400 to 6,850 ft). Rainfall is generally low averaging about 15 cm (6 inches) per annum. There are warm summers and generally mild winters; however, overnight freezing conditions are common during winter.

The Goldfield property is controlled by MVG under certain agreements with underlying owners and actual ownership by MVG. The project is owned by Metallic Goldfield Inc. (MGI), a Nevada corporation and wholly owned subsidiary of MVG. Portions of the property are subject to Net Smelter Returns (NSR) royalties ranging from 3.0 to 5.0% in the Gemfield area (a sliding scale depending on the gold price), 3.0 to 3.5% in the Goldfield Main area (depending on the individual property), and 2.0 to 7.5% in the McMahon Ridge area (depending on the individual property).

1.2.1 Geology and Mineralization

The Gemfield, McMahon Ridge, and Goldfield Main deposits are structurally controlled, volcanic-hosted, epithermal gold deposits of the high-sulphidation, quartz–alunite type. Mineralization is interpreted to be associated with the emplacement of a Miocene-aged intrusive complex and is hosted in a volcanic sequence of tuffs and flows of Oligocene and Miocene age. Intersections between northwest striking, right-lateral strike-slip faults and north to northeast normal faults may have localized volcanic activity and related gold–copper mineral deposits. Mineralization is dominantly structurally controlled and spatially associated with strong silica–alunite alteration. High-grade (>1 oz/st Au) bodies of mineralization occur as irregular sheets and pipes within or along the margins of strongly silica-alunite-altered zones, known locally as ledges. Goldfield district ores consist of native gold associated with bismuth and copper-arsenic-antimony-bearing sulfides and tellurides.

1.2.2 Exploration, Drilling and Sampling

MVG and its predecessor, Romarco Nevada Goldfield Inc. (Romarco) have been exploring in the Goldfield area since 1996. In addition to drilling, MVG have conducted geological mapping, rock and soil geochemistry, and metallurgical test work campaigns. A total of 1,695 RC and diamond holes for 193,536 m (638,668 ft) of drilling were completed prior to MVG's involvement in the project; MVG has drilled an additional 676 holes for 88,724 m (292,789 ft). The MVG drilling is predominantly RC. MVG and AMEC agree there may have been a limited number of instances of potential down hole contamination in the RC programs. These instances of downhole contamination have been adequately mitigated prior to AMEC's involvement. While AMEC recommends that MVG further evaluate down hole contamination in the RC drill holes prior to undertaking more detailed resource estimation, the exclusion of suspect holes from consideration in resource estimation is an acceptable solution for scoping study-level work. Sampling and logging practices and protocols are consistent with industry-standard practices.

MVG performs no sample preparation itself beyond core splitting for diamond drill holes. The eight HQ core holes completed by MVG in 2002 were split on site and ½ of the core split was submitted to ALS Chemex for analysis. PQ core from the drill program completed in the fall of 2003 was sent whole to KCA for sample preparation and testing. At the drill site, RC chip samples are either riffle split (dry samples) or rotary split (wet samples) during drilling. From 2001 to February 2003, samples were prepared and analyzed by ALS Chemex of Reno. Since February 2003, American Assay Laboratories (AAL), Reno, has been the primary laboratory for most samples. Duplicate reject splits from RC samples have been submitted to Florin Analytical Services LLC (wholly owned subsidiary of Kappes, Cassiday, and Associates-KCA) or BSI Inspectorate (Inspectorate America Corporation) for check analyses.

1.2.3 Data Verification and QAQC

Historic quality assurance programs are believed to have been in place with Kennecott and probably other previous owners of the property; however, documentation has not been reviewed. MVG's QA program consists of an extensive check assay program: submitting coarse reject samples, that correspond to mineralized drill intercepts, to a second laboratory for pulverization and fire assay.

AMEC verified data for drill holes completed prior to the end of December 2005 (this is all the data that existed in the database at the time of Scott Long's visit to MVG's Reno office). MVG conducted the majority of work within the Gemfield and McMahon Ridge deposits. MVG campaigns have extensive QC coverage, in the form of reported AAL duplicate results on selected samples, and from a check assay program that re-submitted coarse reject samples corresponding to mineralized intercepts identified by MVG geologists.

The distribution of mineralized drill holes in the Gemfield deposit for MVG and historic drill holes indicates there are no large areas of the deposit that are not covered by MVG drilling. At McMahon Ridge, the MVG campaigns contribute about 74% of the mineralized drill holes and contain about 61% of the mineralized intervals, which shows that there are no significant areas of the deposit that are not covered by MVG drilling. About 60% of the mineralized drill holes and mineralized intervals in the Gemfield resource model are from MVG drilling.

QC is known to have been exercised on the samples assayed prior to MVG's work, but what that data revealed about assay precision and accuracy are not known. MVG established a check assay program as its sole method of validating assay accuracy. No other quality controls were submitted by MVG, such as blind inserted standards, blanks, or duplicates. MVG has also collated results of laboratory duplicates, and has stored all the duplicate results obtained from the assay reports in its database. AMEC regards relative biases shown in check assay programs of less than five percent to be very good agreement which is the case for this project. The check assay results strongly support the accuracy of the original results.

AAL reports approximately five percent of its results in duplicate and a very small percentage of these receive a third assay. AAL internal lab checks are completed using the sample analytical technique (1assay ton fire assay with atomic absorption finish 1AT/FA/AA) from the original sample pulp used for the initial analysis. In cases where the initial gold assay results are greater than 10 ppm, AAL re-assayed the sample using a 1 assay ton gravimetric fire assay (1AT/G/FA). These data are retained in the MVG database. AMEC reviewed duplicate pairs that had pair means exceeding 0.005 oz Au/st. Gemfield duplicates were found to have superior precision to the McMahon Ridge duplicates. This indicates that McMahon Ridge likely has a slightly larger gold particle size in the sample pulps compared to Gemfield. AMEC considers the McMahon Ridge precision acceptable for resource modeling at all grade ranges.

For data verification purposes, AMEC checked original assay data against the MVG database. The assay data in the ACCESS database show a good match with the source documentation and should be considered acceptable for all resource modeling efforts. Checks of drill collar locations with elevations from the drill collar survey plotted on aerial photos showed that neither McMahon Ridge nor Gemfield have a pattern of elevation differences that indicate hole locations were shifted horizontally relative to the topographic coverage which demonstrates the accuracy of the information.

MVG has twinned some RC drill holes with diamond (core) drill holes. AMEC notes that in comparing twins, assays of the RC drill holes are usually about 10% higher than the results from diamond core. The difference should be considered as a minor risk element with respect to the resource estimation process.

1.2.4 Resource Estimation

Resource estimation was undertaken on drilling completed through the end of June 2006. The Gemfield resource model is entirely new, whereas some parameters used in preparing the McMahon Ridge model such as capping thresholds, drill hole compositing, and density were developed in modeling conducted at an earlier date.

In order to evaluate heap leaching, milling, or combined processing options, two Probability Assigned Constrained Kriging (PACK) models were generated using Vulcan® software. The first PACK model (INDZONE 1) was designed for low-grade material suitable for a heap leach operation. The second PACK model (INDZONE 2) was designed to outline higher-grade material that could support a mill process. The two domains in the models allowed different economics and recoveries to be applied to each domain, thus providing the basis for mine and process designs. Although silver assays exist and were modeled previously (Sullivan, J.R. and Srivastava, R.M., 2005), only gold was estimated in this study. Future models should include estimates of silver grades and tons.

Resources amenable to mill processing were found to be limited in the study, therefore the approach of modeling served to control estimates of high-grade material separate from low-grade material only.

The compositing methodology was based on domains established in previous models, which used composites of variable lengths. Composite lengths were 20 feet (bench height) at Gemfield, and 15 feet down-the-hole at McMahon Ridge. All composites at Gemfield, following a capping study by MVG, were capped at 1.0 oz Au/st, whereas composites at McMahon Ridge were capped at 3.0 oz Au/st. Semi-variograms were calculated for both deposits independently for low-grade indicators, low-grade gold, high grade indicators and high-grade gold on the capped composites using Vulcan® and Isatis® mining software. Existing density data was assigned to the corresponding rock types, from which an appropriate tonnage factor was calculated for the model blocks.

A metallurgical model was built to facilitate the application of the metallurgical recovery matrix developed for Gemfield. The metallurgical recovery matrix requires that three variables be estimated for each block in the resource model. These are: an oxide class, a silicification class, and a sulfide class. Each of these variables was estimated using ordinary kriging and the appropriate logged geological descriptor. The three variables were estimated independently.

Preliminary checks on the smoothness of the resource model were evaluated using the discrete Gaussian or Hermitian polynomial change-of-support method. In the Gemfield model, the analyses suggest the model is overly smoothed and will over predict tons by 15% to 25% while underestimating grade by 15% to 20% (variances fluctuate due to changes in cutoff grades). In the McMahon Ridge zone, analyses suggest the model is too coarse and will under predict tons by approximately 15% while overestimating grade by approximately 10%.

The block model was checked for global bias by comparing the average metal grades from the model (kriged grades with no cutoff) with means from nearest-neighbor estimates for all blocks inside the indicator envelopes. In Gemfield, a relative minor negative 6.3% bias exists in the low-grade domain and a 6.1% bias exists in the high-grade domain. Although the low-grade domain at McMahon Ridge demonstrated a minimal bias, there was a 12.9% bias in the high-grade domain, which should be reviewed.

AMEC has found that for precious metal resources, drill hole spacing should be close enough to estimate the grade and tonnage within ±15 percent at 90 percent confidence on a quarterly basis to be classified as Measured and within ±15 percent at 90 percent confidence on an annual basis to be classified as Indicated.

At Gemfield, to meet these requirements for the low-grade domain, a nominal drill hole spacing of 18 m by 18 m (60 ft by 60 ft) is required to classify resources as Measured and a nominal drill hole spacing of 27 m by 27 m (90 ft by 90 ft) is required to classify resources as Indicated. For the high-grade domain, a nominal drill hole spacing of 30 m by 30 m (100 ft by 100 ft) is required to classify resources as Measured, and a nominal drill hole spacing of 55 m by 55 m (180 ft by 180 ft) is required to classify resources as Indicated.

For McMahon Ridge, to meet these requirements for the low-grade domain, a nominal drill hole spacing of 9 m by 9 m (30 ft by 30 ft) is required to classify resources as

Measured and a nominal drill hole spacing of 24 m by 24 m (80 ft by 80 ft) is required to classify resources as Indicated. All blocks estimated within the indicator shells that did not meet the Measured or Indicated classification requirements were classified as Inferred. It is AMEC's opinion that this resource classification meets the standards established by the CIM as specified in NI 43-101.

All confidence limits were based on an assumed daily production rate of 5,500 short tons per day (tpd). In addition, Measured and Indicated resources were required to use at least three and two drill holes, respectively, in the estimation.

A tabulation of the resources inside the proposed Gemfield and McMahon Ridge pits are presented in Table 1-1.

Table 1-1: Mineral Resources in Gemfield and McMahon Ridge Preliminary Pit Shells

Pit	Resource Category	Ore (st)	Au Grade (oz/st)	Contained Oz Au	Waste (st)	Strip Ratio
Gemfield	Measured	8,752,000	0.032	280,064		
	Indicated	3,707,000	0.029	107,503		
	Inferred	88,000	0.116	10,208		
	Subtotal	**12,546,000**	**0.031**	**397,775**	**21,888,000**	**1.74**
McMahon Ridge	Measured	733,000	0.049	35,917		
	Indicated	3,405,000	0.041	139,605		
	Inferred	172,000	0.038	6,536		
	Sub-Total	**4,310,000**	**0.042**	**182,058**	**13,942,000**	**3.23**
Total	**Measured, Indicated, Inferred**	**16,856,000**	**0.034**	**579,833**	**35,760,000**	**2.12**

Notes: 1) Pit designs are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them such that these materials could be categorized as Mineral Reserves. There is no certainty that the preliminary pits will be realized. 2) Optimization parameters include $500/oz Au price, $1.24/t ore mining cost, $0.98/t waste mining cost, $2.51/t ore processing cost, and $0.61/t G&A cost. Gold recoveries vary. 3) Summation errors are due to rounding. 4) Public reporting of these resources must not combine Inferred Resources with Measured and Indicated Resources.

1.2.5 Metallurgy and Process Designs

Metallurgical test work indicates that both the Gemfield and McMahon Ridge deposits would be amenable to heap leaching. No parameters or deleterious constituents were identified that would preclude this type of precious metal recovery operation. Gold recoveries, depending on grind, rock type, and carbon-in-column or carbon-in-leach methodologies, ranged from 69.3% to 98.0% at Gemfield, and from 62.4% to 90.0% for McMahon Ridge.

A preliminary process concept was designed for the Gemfield and McMahon Ridge project in order to develop scoping level capital and operating costs. The process includes crushing, dump truck stacking, heap leaching, carbon-in-column gold and silver recovery, carbon treatment circuit (acid wash/strip/regeneration), precious metal electrowinning and smelting.

1.2.6 Pit Optimization and Production Plan

Optimized pit shells were generated for the Gemfield and McMahon Ridge models using Whittle pit optimization and scheduling software. For this study, all blocks that were estimated were used in the pit optimizations, regardless of their classification.

Mining costs were based on mining 5,500 tpd or 2,007,500 tons per year (tpy). A typical truck and shovel mining operation is envisioned, with trucks dumping to a stockpile near a crusher south of the Gemfield pit. The heap pad is also south of the Gemfield pit, in the vicinity of historical facilities. AMEC estimated ore and waste mining costs to be $1.24/t and $0.98/t, respectively. AMEC estimated operating expenditures for the process plant facilities to be $5.029 million per year or $2.51/t of heap leach feed. MVG provided a general and administrative operating cost estimate of costs $0.61/t. Royalties are payable on both deposits ranging from 3.0 to 5.0% in the Gemfield area (a sliding scale depending on the gold price) and 2.0 to 7.5% in the McMahon Ridge area (depending on the individual property). A metal price of $500/oz Au recovered was used in the optimization process, along with pit slopes of 45 degrees. Dilution and extraction losses were disregarded.

Production scheduling yields a nine-year mine life. US Highway 95 runs north–south across the Gemfield deposit and will have to be relocated to allow open pit mining of a portion of the Gemfield deposit. As such, the production schedule uses a two-phased approach in which the western part of the deposit is mined over the first two years (Phase 1), followed by Phase 2, in which the eastern portion of the deposit is mined after the highway relocation is complete. The McMahon Ridge pit is mined in the last three years of the schedule. The life-of-mine strip ratio is 2.12:1, comprising a strip ratio of 1.74:1 at Gemfield and 3.23:1 at McMahon Ridge.

1.3 Recommendations

1.3.1 Drilling and Sampling

AMEC recommends that MVG further evaluate downhole contamination in the RC drill holes prior to undertaking more detailed resource estimation. Patterns in gold grades downhole that resemble decay and cyclicity can be the result of actual changes in grade through a deposit such as a gradual decrease in grade below a high-grade ledge. For this reason, the drill logs of the identified holes should be reviewed to determine if these patterns are supported by the geology.

1.3.2 Data Verification and QAQC

AMEC recommends:

- that MVG consider the use of blind inserted standards, blanks, or duplicates in future drilling programs;
- that MVG should refrain from using zero in its database to indicate 'no assay', as occurs in some fields such as the check assay fields, as this could be mistaken for a below-detection result. A value of -1 is used as indicating 'no assay' in the primary fields for resource modelling. Gemcom uses 0 as a default during the data entry process. Where 0 occurs in the gold assay table it has been substituted for less than detection values received from the lab. A value of -2 is used in the database for assay values that have been identified as representing potentially contaminated drill intervals which are not included in the resource modelling procedure. Avoiding the use of zero will lessen the potential risk of confusing "no value" with "low value" (below detection).

AMEC notes a difference between assay results from the twinned RC–core comparison, whereby RC holes on average return assay values 10% higher than the core holes, adding risk to the resource estimation process. The reason for this difference should be investigated. The problems between core and RC holes should be noted regarding the sampling efficiency between core and RC when cutting different materials such as clay zones versus ledge zones. Also down hole contamination is easily recognized below mineralized intervals in high water conditions encountered at depths usually greater than 300 feet. In these instances ledge contamination is easily recognized in unmineralized rock and these intervals have been removed from the modelling procedure. Monitoring RC drilling recovery would help establish events where mineralized intervals have been diluted with barren material. In an attempt to qualify relative RC sample recoveries, MVG has each drill sample weighed by laboratory personnel prior to sample preparation. These data have been imported into the GEMCOM database since June 2002. By having these data, very high or very low sample weights combined with references to drilling conditions noted in the drill logs, MVG geologists have some basis for determining whether or not there is cause for concern regarding the representative character of certain assay values. RC sample weight data is unfortunately unavailable for drill samples collected prior to this date.

1.3.3 Resource Estimates

AMEC recommends:

- that the compositing methodology should be based on the new indicator domains and not the historic domains based on lithology. AMEC also suggests that a shorter and consistent composite length be evaluated for future models to help give better definition to delineating the mineralized domains.
- that future models contain estimates for silver grades and tons.
- that the delineation between the high-grade and low-grade domains should be re-evaluated so the highest grade composites are contained in the high-grade domain, and that future capping studies use a method that estimates the amount of metal at risk and the spatial relations of data available. AMEC also recommends that the capping studies be performed on the raw assays before compositing.
- that the 6.1% bias in the high-grade domain and the -6.3% bias in the low-grade domain at Gemfield should be reviewed.
- that the 12.9% bias in the high-grade domain at McMahon Ridge should be reviewed.

AMEC believes that the high-grade domain is too restrictive at Gemfield, and could be expanded to include more of the higher-grade composites. This would also reduce the smearing of these high-grade samples in the low-grade domain.

Although setting the minimum number of samples to one is not an issue for McMahon Ridge, AMEC still recommends that a minimum number of samples used in the modeling parameters should be no lower than three.

1.3.4 Processing

AMEC recommends adding elements such as silver and sulfur to the block model to assist in distinguishing mineralization types for each of the deposits. The test work executed by Kappes Cassiday and Associates (KCA) was based on high-grade composites, which did not cover the range of mineralization types for each deposit. To further advance the metallurgical understanding of the deposits, it will be necessary to assemble representative composite samples of all mineralization types and the average grades to be mined. Long-term heap leach tests (120 days or greater) will be required for each of the identified mineralization types.

Further test work will be required to optimize the heap leach parameters to support a prefeasibility study, and to generate the environmental information necessary to characterize the waste rock and the spent heap leach material. Attention will be required to analyze for potential high cyanide consumers and cyanicides including cyanide soluble copper and base metal sulfides.

1.3.5 Mining and Production Plan

Pit optimization designs include Inferred Mineral Resources. Additional drilling will be required to increase confidence and upgrade classification of in-pit Inferred resources prior to undertaking more in-depth studies, if MVG wants to take credit for metal contained in these resources.

Evaluation of different gold prices on pit shells is recommended.

Further evaluations are needed for the Gemfield and McMahon Ridge pits to level the stripping profile and reduce stripping requirements in some periods. This might be achieved with the introduction of additional pushbacks, provided adequate working widths can be maintained in the pits.

AMEC notes condemnation drilling will be required in advance of the proposed highway relocation project to provide clearance for open pit mining of the Gemfield deposit.

Operating costs used in the pit optimizations are factored from costs for similar operations. AMEC recommends estimating operating costs from first principles for future pit optimizations.

Mining of resources from the Goldfield Main deposit should be considered in the future, which were not included in this analysis.

2.0 INTRODUCTION

2.1 Purpose of Work

MVG commissioned AMEC to conduct work on the Gemfield and McMahon Ridge gold deposits within the Goldfield Project, Esmeralda County, Nevada, to include the following: a review of project exploration data, geological models, resource estimates, scoping-level determination of mining and processing operating costs, preliminary pit designs, assessment of mining rates, review of metallurgy and process options. The operation will involve mining of oxide and mixed oxide/sulfide gold mineralization from the Gemfield and McMahon Ridge, volcanic-hosted gold deposits. Additional mineralization is present in the Goldfield Main area, where most of the historical production from the district was derived; however, Goldfield Main mineralization was not included in this study.

As part of this work, AMEC verified that exploration data are of suitable quality to support preparation of resource estimates. Assistance was also provided in preparing resource estimates to ensure that the estimates were acceptable for mine designs and compliant with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves (2000), CIM Definition Standards for Mineral Resources and Mineral Reserves (2000) and Canadian National Instrument 43–101 of the Canadian Securities Administrators. The format and content of the report are intended to conform to Form 43-101F1. AMEC understands that this report will be submitted to the TSX Exchange in support of filings by MVG.

The effective date of this report is 25 September 2006.

AMEC is not an associate or affiliate of MVG or any associated company. AMEC's fee for this report is not dependent in whole or in part on any prior or future engagement or understanding resulting from the conclusions of this report. This fee is in accordance with standard industry fees for work of this nature, and AMEC's previously provided estimate is based solely upon the approximate time needed to assess the various data and reach the appropriate conclusions.

Historical data used to prepare this report exists in both metric (SI) and imperial formats. In order to avoid errors associated with conversion and rounding, most data is presented in its original form; however, limited data is presented in both Imperial and SI units for convenience. Unless stated otherwise, currencies are expressed in constant 2006 US dollars. Gold concentrations are reported in troy ounces per short ton (oz/st) and/or grams per metric ton (g/t). One oz/st equals 34.286 ppm. One troy ounce equals 31.1035 grams.

2.2 Sources of Information

MVG provided exploration databases and resource model files, and information on mineral claims, claim boundaries, agreements, royalties and Nevada Department of Transportation costs for relocation of US Highway 95.

Other information regarding the exploration history, geology, drilling practices, sampling and assaying were obtained from previous technical reports and MVG internal reports, as listed in the References section. A considerable portion of the description of the project history, geology and exploration methods were derived from a NI 43-101 Technical Report by WGM (2005).

2.3 Qualified Persons

Gordon Seibel, (M.AusIMM), Brian Kennedy, (P.Eng (B.C.)), and Scott Long, (M.AusIMM), employees of AMEC, and Timothy Carew, (P.Geo. (B.C).and C.Eng (UK)) Associate Geological Engineer of AMEC, served as Qualified Persons in preparation of this report.

Gordon Seibel and Brian Kennedy visited the property on November 28 and 29, 2005 and reviewed the geology, exploration data, drilling practices and project development concepts.

Scott Long visited MVG's Reno, Nevada office on June 26 to 30, 2006 and audited exploration databases, containing drilling up to December 2005. Mr. Long also reviewed historical assay quality assurance and quality control data and assessed the quality of assays used in resource estimates.

Timothy Carew developed open pit mine designs, production plans and operating costs by factoring costs from comparable operations. Brian Kennedy developed heap leach facility designs and process operating costs, from first principles.

2.4 Units of Measure

2.4.1 Common Units

Above mean sea level	amsl
Ampere	A
Annum (year)	a
Billion years ago	Ga
British thermal unit	Btu
Candela	cd
Carat	ct

Carats per hundred tonnes	cpht
Carats per tonne	cpt
Centimeter	cm
Cubic centimeter	cm^3
Cubic feet per second	ft^3/s or cfs
Cubic foot	ft^3
Cubic inch	in^3
Cubic meter	m^3
Cubic yard	yd^3
Day	d
Days per week	d/wk
Days per year (annum)	d/a
Dead weight tonnes	DWT
Decibel adjusted	dBa
Decibel	dB
Degree	°
Degrees Celsius	°C
Degrees Fahrenheit	°F
Diameter	ø
Dry metric ton	dmt
Foot	ft
Gallon	gal
Gallons per minute (US)	gpm
Gigajoule	GJ
Gram	g
Grams per liter	g/L
Grams per tonne	g/t
Greater than	>
Hectare (10,000 m^2)	ha
Hertz	Hz
Horsepower	hp
Hour	h (*not* hr)
Hours per day	h/d
Hours per week	h/wk
Hours per year	h/a
Inch	" (symbol, *not* ")
Joule	J
Joules per kilowatt-hour	J/kWh
Kelvin	K
Kilo (thousand)	k
Kilocalorie	kcal
Kilogram	kg
Kilograms per cubic meter	kg/m^3
Kilograms per hour	kg/h
Kilograms per square meter	kg/m^2
Kilojoule	kJ
Kilometer	km
Kilometers per hour	km/h
Kilonewton	kN
Kilopascal	kPa

Kilovolt	kV
Kilovolt-ampere	kVA
Kilovolts	kV
Kilowatt	kW
Kilowatt hour	kWh
Kilowatt hours per short ton (US)	kWh/st
Kilowatt hours per tonne (metric ton)	kWh/t
Kilowatt hours per year	kWh/a
Kilowatts adjusted for motor efficiency	kWe
Less than	<
Liter	L
Liters per minute	L/m
Megabytes per second	Mb/s
Megapascal	MPa
Megavolt-ampere	MVA
Megawatt	MW
Meter	m
Meters above sea level	masl
Meters per minute	m/min
Meters per second	m/s
Metric ton (tonne)	t
Micrometer (micron)	µm
Microsiemens (electrical)	µs
Miles per hour	mph
Milliamperes	mA
Milligram	mg
Milligrams per liter	mg/L
Milliliter	mL
Millimeter	mm
Million	M
Million tonnes	Mt
Minute (plane angle)	'
Minute (time)	min
Month	mo
Newton	N
Newtons per meter	N/m
Ohm (electrical)	Ω
Ounce	oz
Parts per billion	ppb
Parts per million	ppm
Pascal (newtons per square meter)	Pa
Pascals per second	Pa/s
Percent	%
Percent moisture (relative humidity)	% RH
Phase (electrical)	Ph
Pound(s)	lb
Pounds per square inch	psi
Power factor	pF
Quart	qt
Revolutions per minute	rpm

Second (plane angle)	"
Second (time)	s
Short ton (2,000 lb)	st
Short ton (US)	t
Short tons per day (US)	tpd
Short tons per hour (US)	tph
Short tons per year (US)	tpy
Specific gravity	SG
Square centimeter	cm^2
Square foot	ft^2
Square inch	in^2
Square kilometer	km^2
Square meter	m^2
Thousand tonnes	kt
Tonne (1,000 kg)	t
Tonnes per day	t/d
Tonnes per hour	t/h
Tonnes per year	t/a
Total dissolved solids	TDS
Total suspended solids	TSS
Volt	V
Week	wk
Weight/weight	w/w
Wet metric ton	wmt
Yard	yd
Year (annum)	a

2.4.2 Common Chemical Symbols

Aluminum	Al
Ammonia	NH_3
Antimony	Sb
Arsenic	As
Bismuth	Bi
Cadmium	Cd
Calcium	Ca
Calcium carbonate	$CaCO_3$
Calcium oxide	CaO
Calcium sulphate di-hydrate	$CaSO_4{\cdot}2H_2O$
Carbon	C
Carbon monoxide	CO
Chlorine	Cl
Chromium	Cr
Cobalt	Co
Copper	Cu
Cyanide	CN
Gold	Au
Hydrogen	H
Iron	Fe

Lead	Pb
Magnesium	Mg
Manganese	Mn
Manganese dioxide	MnO_2
Manganous hydroxide	$Mn (OH)_2$
Molybdenum	Mo
Nickel	Ni
Nitrogen	N
Nitrogen oxide compounds	NOx
Oxygen	O_2
Palladium	Pd
Platinum	Pt
Potassium	K
Silver	Ag
Sodium	Na
Sulfur	S
Tin	Sn
Titanium	Ti
Tungsten	W
Uranium	U
Zinc	Zn

2.4.3 Metric Conversion Factors (divided by)

Short tons to tonnes	1.10231
Pounds to tonnes	2204.62
Ounces (Troy) to tonnes	32,150
Ounces (Troy) to kilograms	32.150
Ounces (Troy) to grams	0.03215
Ounces (Troy)/short ton to grams/tonne	0.02917
Acres to hectares	2.47105
Miles to kilometers	0.62137
Feet to meters	3.28084

2.4.4 Abbreviations

American Society for Testing and Materials	ASTM
Canadian Institute of Mining and Metallurgy	CIM
Global Positioning System	GPS
Internal Rate of Return	IRR
Net Present Value	NPV
Rock Quality Designation	RQD
Universal Transverse Mercator	UTM
Reverse Circulation	RC
Diamond Drill	DD

3.0 RELIANCE ON OTHER EXPERTS

In preparing this report, AMEC has relied on legal, mineral title and topographic information contained within reports and maps listed in the References section at the conclusion of this report.

AMEC has not independently reviewed the land tenure, nor independently verified the legal status or ownership of the properties or underlying option and/or joint venture agreements. Information of these subjects were provided by MVG and assumed by AMEC to be reliable.

Estimates of highway relocation costs and reclamation costs were obtained from the State of Nevada.

The results and opinions expressed in this report are conditional upon the aforementioned technical and legal information being current, accurate, and complete as of the date of this report, and the understanding that no information has been withheld that would affect the conclusions made herein. AMEC reserves the right to revise this report and conclusions if additional information becomes known to AMEC subsequent to the date of this report. AMEC does not assume responsibility for MVG's actions in distributing this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Goldfield property straddles the boundary between Esmeralda and Nye Counties, and is immediately adjacent to the historic mining town of Goldfield, Nevada. US Highway 95, the main route from Reno to Las Vegas, cuts across the western portion of the property. The Gemfield deposit, within the Property, is entirely concealed beneath alluvium and a portion of this deposit is beneath the highway. Tonopah is 42 km (26 miles) to the north and Reno is 420 km (260 miles) to the northwest. Las Vegas lies 295 km (183 miles) to the south. The mining district is crossed by a network of gravel roads, providing easy access to various portions of the property. The location of the project relative to major features in Nevada is shown in Figure 4-1.

4.2 Property Description and Mineral Rights

MVG acquired its initial interest in Goldfield when it purchased all of the shares of Romarco Nevada Goldfield Inc. in April 2001. In August, 2002, MVG added the Gemfield deposit and claims to the property when it purchased the deposit and claims from Newmont Capital for $1,000,000 and a sliding-scale royalty tied to the price of gold.

The Goldfield property is controlled by MVG under certain agreements with underlying owners and actual ownership by MVG. The project is owned by Metallic Goldfield Inc. (MGI), a Nevada corporation and wholly owned subsidiary of MVG.

Portions of the property are subject to Net Smelter Returns (NSR) royalties ranging from 3.0 to 5.0% in the Gemfield area (a sliding scale depending on the gold price), 3.0 to 3.5% in the Goldfield Main district (depending on the individual property), and 2.0 to 7.5% in the McMahon Ridge area (depending on the individual property). Land holding costs for 2006 are approximately $381,398 for the entire Goldfield Project.

MVG's patented and unpatented claims cover a majority of the historical Goldfield district (Figure 3-2). Total holdings are 488 patented lode mining claims and 1017 (643 owned, 374 leased) unpatented claims totaling approximately 8,400 hectares (20,800 acres) in both Esmeralda and Nye Counties. Claims cover portions or all of Sections 13, 23-27, and 33-36, T.2S., R.42E., Sections 18-21 and 27-34, T.3S., R.42E., Sections 1 and 12, T.3S., R.42E., and Sections 1-15, T.3S., R.43E., MDM. A complete list of mining claims is provided in Appendix A.

Figure 4-1: Location of Goldfield Project

Patented claims are granted in accordance with the U.S. General Mining Law of 1872 and provide unencumbered outright ownership to the surface and mineral rights of the land being patented. Patented claims do not expire and are a form of "fee-simple" title to both use of the surface and minerals not subject to government royalties.

Unpatented mining claims are also created and maintained in accordance with the U.S. General Mining Law of 1872. An unpatented mining claim is that portion of public mineral lands, which a party has staked or marked out in accordance with federal and state mining laws to acquire the right to explore for and exploit the minerals on, or under, the surface. The unpatented claims bring a right to mine but do not transfer title from the government to the claiming entity. The unpatented mining claims are administered by the United States Department of Interior, Bureau of Land Management ("BLM") in accordance with rules and fees that are modified from time to time. Surface estate of lands claimed by unpatented mining claims is administered by either the BLM or the U.S. Forest Service, depending on the location of lands. The current federal annual unpatented mining claim maintenance fee is $125 per claim.

The claims do not expire as long as claim maintenance fees are paid. Both patented and unpatented claims are a maximum of approximately 8.4 ha (20 acres) in size.

Currently there are no federal royalties on gold production from unpatented mining claims located on federal lands. Patented and unpatented claims grant the holder an unrestricted right to exploit deposits defined on them, subject to obtaining relevant operational permits for exploration and mining activities.

Patented mining claims are surveyed as part of the patenting process. Unpatented claims were also surveyed.

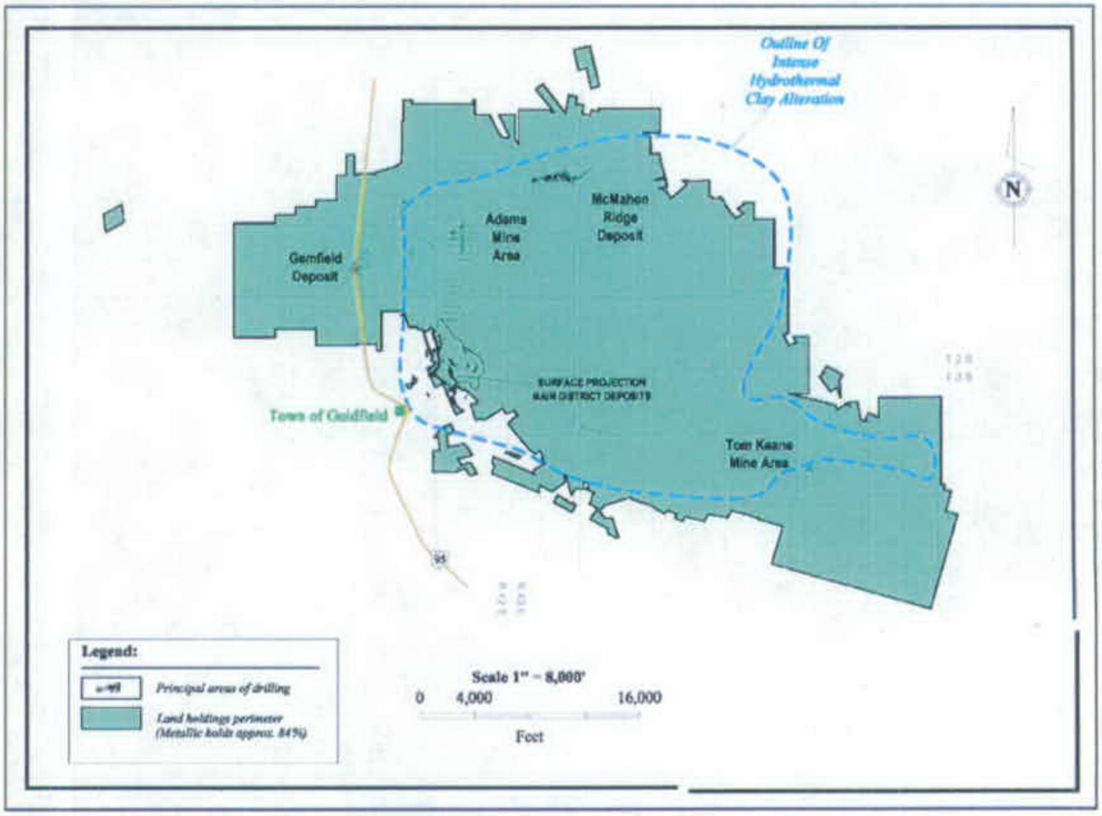
Fee lands and private lands are forms of patents issued by governments under the terms of acts or laws other than the General Mining Law, such as the Homestead Act, and may or may not have mineral rights attached.

All of MVG's exploration, development and production activities are subject to regulation under several state and federal environmental laws and regulations. MVG must update and review these permits from time to time and is subject to environmental impact analyses and public review processes prior to approval of additional activities. MVG conducts its exploration activities on federal lands under a Plan of Operations ("POO") for the Gemfield deposit and two Notices of Intent to Conduct Mineral Exploration Activities. The Notices of Intent are in good standing and will remain in effect provided the surface disturbance under each does not exceed five acres in size. MVG has also completed an Environmental Assessment (EA) for the POO to further advance drilling on the Gemfield area. Reclamation of exploration disturbances on all of MVG's Nevada properties is covered by a bond totalling \$60,000. Development of the Goldfield deposits will require significant expenditures for environmental studies and permitting.

The location of mineralization and mineral resources on the property relative to property boundaries are shown in Figure 4-2. The Goldfield Main deposit is located immediately adjacent to the town site on the east, the McMahon Ridge deposit is 6.5 km (4 miles) northeast of town, and the Gemfield deposit lies about 3 km (2 miles) north of Goldfield.

Proposed mine and process facilities are located near the Gemfield deposit and are entirely within the property boundaries.

Figure 4-2: Location of MVG Mining Claims, Mineralization and Resources



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Topography and Vegetation

Elevations in the Goldfield area range from 1,650 to 2,100 m (5,400 to 6,850 ft). Relief is 450 m (1500 ft) and consists of basins between relatively low hills. Vegetation is sparse, consisting of sagebrush, Joshua trees and desert grasses.

5.2 Access

US Highway 95, the main route from Reno to Las Vegas, cuts across the western portion of the property. The Gemfield deposit, within the Property, is entirely concealed beneath alluvium and a portion of this deposit is beneath the highway. Tonopah is 42 km (26 miles) to the north and Reno is 420 km (260 miles) to the northwest. Las Vegas lies 295 km (183 miles) to the south. The mining district is crossed by a network of gravel roads, providing easy access to various portions of the property.

5.3 Climate

The Goldfield property is in the high desert region of the Basin and Range physiographic province. Precipitation averages 15 cm (5.8 inches) per year, primarily derived from snow and summer thunderstorms. There are warm summers and generally mild winters; however, overnight freezing conditions are common during winter. The mean annual temperature is 10.6°C (51°F). The operating season is year round.

5.4 Local Resources and Infrastructure

Mining has been an active industry in western Nevada for more than 150 years. Goldfield had a population of 25,000 in 1909 when mining in the central portion of the district was at its height. Its population is now 350. Commercial activities are generally those associated with being the county seat of Esmeralda County. The electric power grid is sufficient to support a large mining operation. Water is derived from wells and is purchased from the town.

Tonopah has a population of 3,100 and is a full-service community. Trained labor, accommodations, most required commercial services and educational and medical facilities can be sourced from Tonopah, approximately 30 miles north of Goldfield.

6.0 HISTORY

6.1 Metallic Ventures Gold Inc.

Western Nevada has been mined for gold since 1849, when a placer deposit was discovered beside the Carson River south of Reno. Major historical districts include the Comstock, a world-class silver district that produced over a million ounces of gold as by-product, the gold-dominant Buckskin, Aurora, Yerington, Tonopah districts; and Goldfield district, where the properties that are the subject of this report are located.

American mining engineers and entrepreneurs Jeff Ward and Richard McNeely began a program of acquiring gold properties, most of them hosting defined Mineral Resources, in the western United States during a period of depressed gold prices in the late 1990s. A private company was formed by the partners in 1998 to acquire, carry out exploration and development programs and ultimately achieve production from the properties. This private company subsequently became Metallic Ventures Gold Inc. ("MVG" or "Metallic") and is listed on the Toronto Stock Exchange ("TSX").

Ongoing exploration programs have led to success in defining additional Mineral Resources on several of the MVG properties including Goldfield.

6.2 District History

In 1902, a Shoshone Indian named Tom Fisherman came into Tonopah with some gold ore that he had found about 40 km (25 miles) to the south near the site of present day Columbia Mountain. Two prospectors, William Marsh and Harry Stimler, subsequently located three claims on December 4, 1902, and additional 16 claims in 1903 at the north end of Columbia Mountain. On May 24th, 1903, Alva Myers and Robert C. Hart located the famous Combination group of claims south of Columbia Mountain in the present day location of the Goldfield Main district. Charles Taylor located the Florence group of claims, including the Jumbo and Red Top mine areas, in May 1903, and over the next six years, produced $1,250,000 dollars worth of gold (at the then gold price of $20.67 per troy ounce). Thomas Ramsey and R. C. Crook located the Tennessee and Berkeley claims which later became the location of the rich Mohawk mine. The Goldfield mining district was organized on October 20, 1903. The initial townsite of Goldfield was laid out on October 24, 1903. The first shipment of ore was shipped from the Combination No. 2 claim in November 1903 (Schamberger 1982).

A major gold rush ensued. In just the first six weeks of 1904 Goldfield grew from 400 to 1,000 residents. The Mohawk mine produced $5,000,000 worth of gold in the first 106 days. Production of over 110,000 ounces of gold from 8,000 tons at an average grade of 427.67 g/t Au (13.75 oz/st) was recorded in 1904.

In September 1905, the Tonopah and Goldfield railroad was completed. Goldfield had a population of about 8,000 residents and was still growing. By 1905, a dozen mines in town had produced gold to the value of nearly $7,000,000, with the Florence mine at the top of the list with production valued at $1,848,000.

Late in 1907, the majority of mines in the district were taken over by the Goldfield Consolidation Mines Company. By 1910, the population of Goldfield had risen to 20,000, and the mines had a record year of production, valued at $11,214,278. However, by 1919, Goldfield Consolidation had closed the last of their mills and moved the equipment to other regions of the state.

Minor production continued from leasing operations (claim owners commonly leased out numerous small portions of their holdings on an annual basis) through 1926. Between 1927 and 1937, about 3.1 million tons of tailings were reprocessed and 160,800 ounces of gold were recovered at an average grade of 1.55 g/t Au (0.05 opt Au). Several mining companies worked and explored the areas between 1935 and 1951; however, production was relatively minor.

According to the University of Nevada Bulletin Vol. 37, No. 4 published November 1, 1943, production values for the eight top producers in the Goldfield Main district are as follows:

Goldfield Consolidated Mines Co.	$50, 992, 261	(1905-1940)
Goldfield Mohawk	$9,073,214	(1906-1909)
Florence Goldfield Mining Co.	$6,589,141	(1905-1929)
Combination	$3,712,006	(1903-1908)
Jumbo Extension Mining Co.	$2,864,345	(1907-1902)
Bradshaw Inc. (tailings Au recovery)	$2,703,717	(1927-1938)
Jumbo Mining Co.	$1,371,165	(1904-1909)
Red Top Mining Co.	$1,094,265	(1906-1909)

Over four million ounces of gold were produced from the area in the period 1903–1960.

Modern gold production has been confined to the Goldfield Main area, extending from the southern tip of Columbia Mountain on the north, to the Red King shaft located approximately 1.5 km to the south. Most of this production has come from open pit mining in the Red Top, Combination and Jumbo mine areas.

Recent operations in Goldfield have focused more on exploration and production from heap-leach oxide deposits. The scope of these operations has been restricted to a large degree by the fragmented character of land ownership in the district. A partial list of companies that have explored for and/or produced gold in the district since the 1970s includes Cordex Exploration Company, Noranda Exploration Company, Cyprus Mines Corporation, Newmont, Meridian Precious Metals, Echo Bay Exploration Inc, AMAX Exploration, Inc., Santa Fe Pacific Gold Corporation, Kennecott Exploration Company, Cameco, North Mining Inc. (North) and Romarco Minerals Inc.

Beginning in 1970, Blackhawk Mines leached 60,000 tons of tailings grading 2.43 g/t Au (0.078 oz/st Au), recovering 75% of the gold. From 1979 to 1981, Blackhawk also mined and heap leached ore from the Adams pit and some of the Goldfield Main area dumps. Transwestern Mining Company leached 62,900 tons of mixed dump and tailings, achieving a 61% Au recovery. Dexter Gold Mines Inc. mined 357,000 tons at 1.80 g/t Au (0.058 oz/st Au) of material from the Main district in the Red Top pit, during the period 1986 to 1988. Red Rock Mining Limited commenced mining waste dumps in 1989 and delivered a total of 285,000 tons to the crusher stockpile. A total of 242,000 tons was crushed and agglomerated but apparently only 149,000 tons grading 2.43 g/t Au (0.078 oz/st Au) were properly agglomerated. A total of 7,500 ounces of gold was recovered from the dump leaching operation yielding a gold recovery of 65%.

Geophysical surveys have been carried out in various locations in the district since 1980. MVG has most of these datasets. Induced polarization-resistivity ("IP") and CSAMT surveys are effective in identifying intense silicification (silica "ledges") that is associated with gold mineralization.

Production figures for the district since 1990 are lacking; however, the Nevada Bureau of Mines reports only 28,400 ounces of gold were produced during the 1980s and 1990s (Mine Development Associates, 2002). Heap leach ore was extracted by American Resource Corporation, Inc. (ARC) from the Combination, Red Top and Jumbo open pits during the early 1990s. American Pacific Minerals reported in 1995 that 532,379 tons grading 0.044 opt Au (1.51 g Au/t) were mined from ARC's pits. North leased the exploration rights for the property in 1996 and conducted exploration activities through 1998.

In 1998, Rea Gold Corporation and its subsidiaries, including ARC, declared bankruptcy, and the property interests and reclamation responsibilities were acquired by Decommissioning Services LLC (DSL), a Reno, Nevada private company. Romarco Nevada Goldfield Inc. ("Romarco Goldfield"), a wholly owned subsidiary of Romarco Minerals Inc., obtained a mining sublease, lease and option to purchase agreement for the DSL properties in 1999. Romarco Goldfield conducted exploration activities on the property until MVG purchased all of its issued and outstanding shares in April 2001. MVG has been actively exploring for gold throughout the greater Goldfield district since that time, concentrating much of its activity on the McMahon Ridge and Gemfield areas, following the acquisition of the Gemfield portion of the property from Newmont Capital in August 2002.

7.0 GEOLOGICAL SETTING

7.1 Regional Geology

The Goldfield district is located in the southwest portion of the Basin and Range physiographic province. The district is within the Walker Lane Structural Belt that trends northwest, parallel to the State line between Nevada and California. The Belt comprises a series of west-northwest strike-slip faults and north- to northeast-striking oblique-slip and normal faults. The physiographic character of the region is typical of that throughout the Basin and Range province, having north-trending mountain ranges with intervening valleys.

Within a 50 km radius of Goldfield are a number of mining districts, including the Tonopah, Divide and Klondyke to the north, the Cactus, Wellington and Antelope Springs to the east, the Cuprite, Stonewall and Railroad Springs to the south and the Montezuma, Silver Peak and Lone Mountain to the west. The principal commodities are gold and silver, but deposits of copper, lead, manganese and mercury have also been identified.

The region surrounding Goldfield is underlain by Paleozoic marine sedimentary and metamorphic rocks which have been intruded or overlain by younger igneous rocks of Mesozoic and Tertiary age (Figure 7-1). Mineralization in the region is interpreted to be spatially related to Tertiary intrusives, dominantly hosted in Oligocene to Miocene volcanic rocks, and is primarily epithermal.

7.2 District Geology

A thick series of eruptive volcanic rocks in the form of tuffs, domes, and flows defines a complex and long-lived volcanic center that dominates the local geology of the Goldfield mining district. The center is marked by curviplanar faults that outline a 7-km diameter ring-fracture zone, eruptive vents and concentric structural doming (Figure 7-2). The volcanic rocks and associated interbedded volcaniclastic sedimentary rocks range in age from Oligocene to Miocene.

High sulphidation-style, quartz–alunite hydrothermal alteration, and widespread gold–(enargite copper) mineralization in the Goldfield district are considered by MVG geologists to be most likely associated with the emplacement of an igneous intrusive complex of Miocene (20-23 Ma) age. Intersections between northwest-striking right-lateral strike-slip faults and north to northeast normal faults may have localized volcanic activity and related gold–copper mineral deposits. The general sequence of geological events that have occurred in the Tertiary period in the Goldfield district is interpreted to be as follows:

1) Development of the East Goldfield structural zone and subsequent development of a major northwest striking right lateral shear zone passing along the south edge of the present location of the Goldfield Main district (pre-33 Ma?).
2) Eruption of the early rhyolite (Morena-Vindicator) and latitic volcanic sequence, and possible initial development of a ring-fracture fault system (~33-30 Ma).
3) Deposition of the sediments included with the Diamondfield Formation and the Sandstorm Rhyolite (~28 Ma).
4) Resurgence, uplift, and eruption of the Milltown Andesite, Main District rhyodacite, and likely emplacement of a central intrusive complex in the core of the Goldfield district (~23-20 Ma).
5) Continued development of the controlling right-lateral strike-slip fault system, including the development of a right-stepping releasing bend in conjunction with the Columbia Mountain fault, and development of an intervening zigzag pattern of fractures and shears (tensile shear mesh) in the present location of the Goldfield Main district (~21-20 Ma).

6a) Onset of the Goldfield hydrothermal system, partly coeval with the development of structure in the Goldfield Main district. This event initially produced intense silicification, formation of multiple silica ledge zones, and propylitized the adjacent rhyodacite, dacite, and Milltown Andesite wall rocks (~20.5 Ma)

6b) Stage two structural development, continued intrusion, uplift and hydrothermal-fracturing and local brecciation of silica ledge zones and adjacent wall rocks.

6c) Inferred pre-gold-stage acid-leach event.

6d) Intense argillic alteration of the wall rock/ledge contacts.

6e) Main-stage gold event(s).

6f) Barren, open-space-fill, translucent quartz vein emplacement.

7) Post-mineral faulting, deposition of post-mineral volcanic and sedimentary units, and deep erosion of the Goldfield volcanic center (20 Ma to present).

Figure 7-1: Regional Geology and Project Location

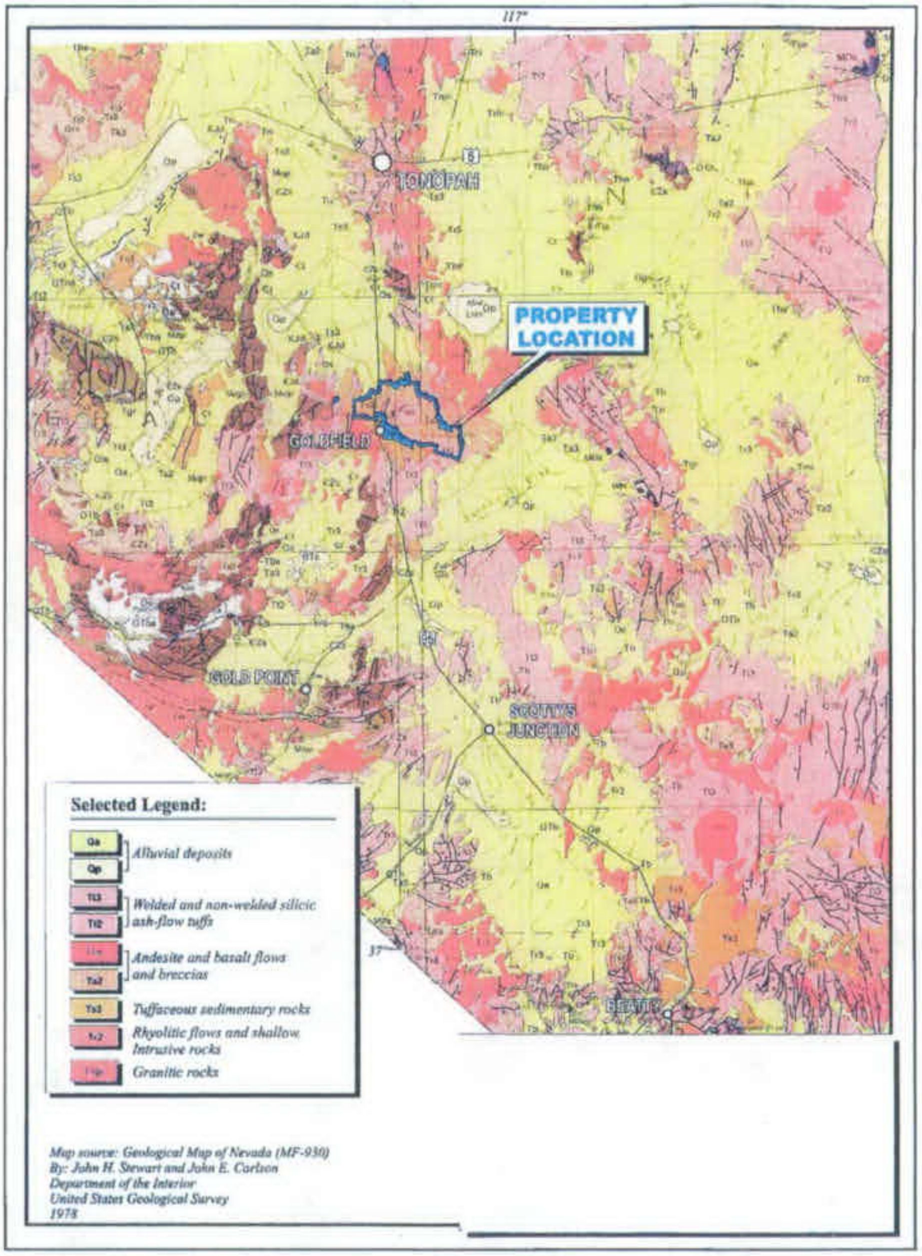
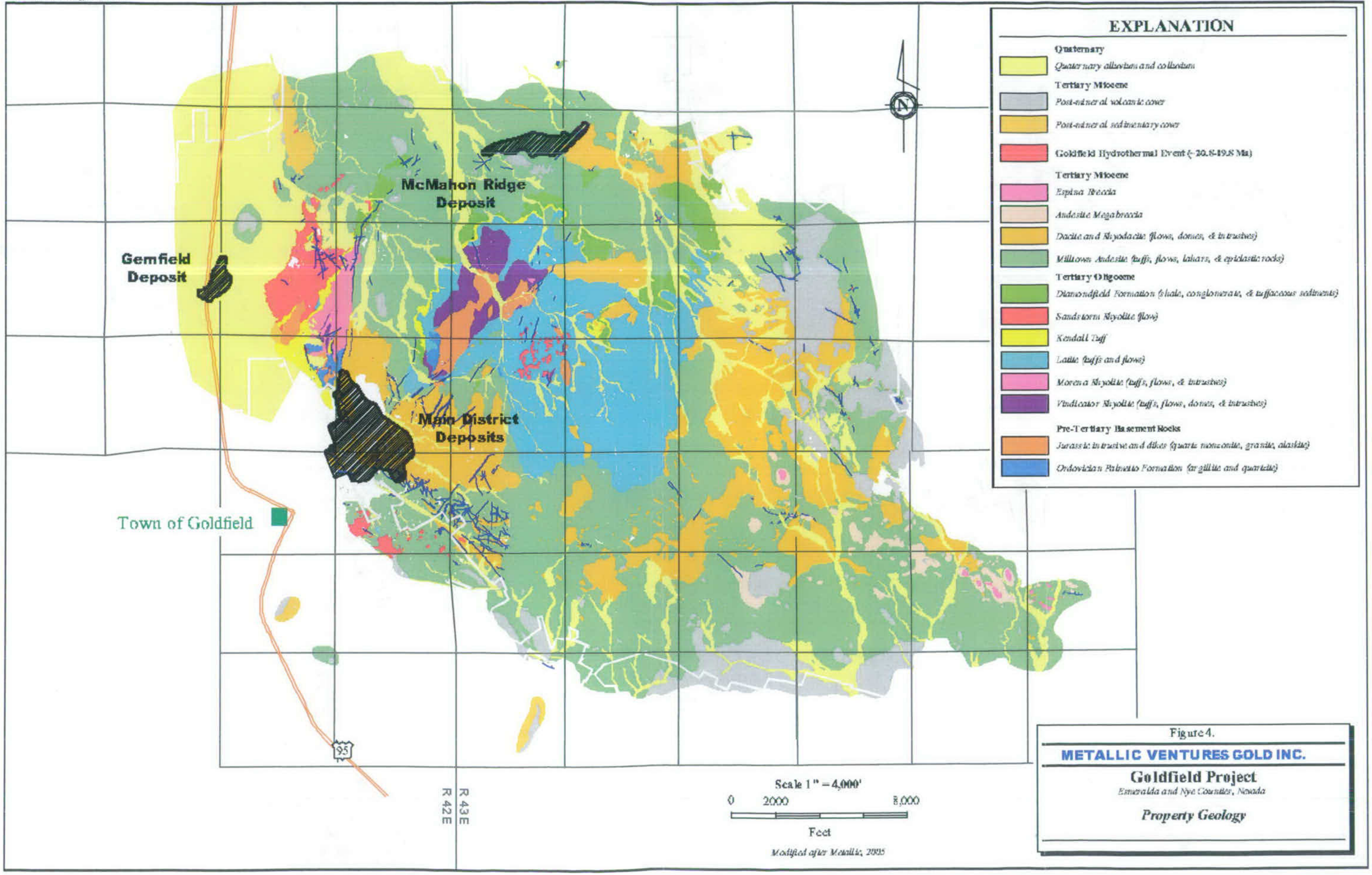


Figure 5.2: Local Geology



Mineralization is dominantly structurally controlled and spatially associated with strong silica–alunite alteration, forming "ledges". High-grade (>1 oz/st Au) bodies of mineralization occur as irregular sheets and pipes within or along the margins of the silica ledges. Goldfield district ores consist of native gold associated with bismuth and copper-arsenic-antimony-bearing sulfides and tellurides including bismuthinite, famatinite, and goldfieldite. Fine native gold is often visible in the rich ores characteristic of the Goldfield Main district, although it also occurs as fine particles in base metal sulfides.

7.2.1 Goldfield Main District

Mineralization in the Goldfield Main district occurs at the intersection of the north-striking and east-dipping Columbia Mountain fault zone and the west–northwest-striking East Goldfield structural belt. High-grade gold-copper deposits are structurally controlled, chimney shaped ore bodies that likely occur in a right-stepping releasing bend located on the north side of a controlling right-lateral strike slip fault. This structural setting has developed a complex zig-zag pattern or tensile shear mesh of intersecting north- to northeast-striking extensional oblique-slip and normal faults with northwest striking shear fractures (Berger, Anderson, Phillips, and Tingley, 2005 p. 274-277).

These major structural elements either pre-date mineralization or significant displacement along these structures occurred contemporaneously with the gold-copper mineralizing event. These structures and structural intersections appear to have been the primary plumbing system for ascending, mineral-bearing, hydrothermal fluids at this location. Notable minor displacement of altered and mineralized rocks is evidence of post-mineral normal fault movement mainly on north-south trending Basin and Range faults.

Gold-copper mineralization in the Goldfield Main district is hosted primarily in a 20–23 Ma porphyritic rhyodacite to dacite flow-dome complex. Mineralization is also hosted in the partly coeval Milltown Andesite, the most notable examples of which occur in the Florence and Little Florence gold mines located at the south end of the Goldfield Main district. Gold–copper mineralization is also hosted at depth in the ~33 million-year-old latite volcanic sequence and older pre-Tertiary rocks including the Ordovician Palmetto Formation and Jurassic intrusive rocks.

7.2.2 Gemfield Deposit Area

Gemfield lies about 1.6 km (5,400 feet) west of the Columbia Mountain fault and is hosted in the 28.6 Ma Sandstorm Rhyolite. This unit is generally overlain by the Miocene (21.5 Ma) Milltown Andesite and underlain by the Oligocene (33 Ma) latite volcanic sequence. Gold mineralization in the Gemfield deposit is probably genetically related to the same gold–copper-mineralizing event(s) that formed the high-grade ore bodies in the Goldfield Main district.

Mineralization is both stratabound, hosted in the Sandstorm Rhyolite, and disseminated, forming a halo of lower-grade mineralization surrounding high-grade ore bodies that are usually spatially related to silica ledges.

The Gemfield deposit occurs within a north-trending structural horst block that is bound on the east, west, and south by post-mineral normal faults. The deposit has a known strike length of approximately 730 m (2,400 ft) and is 366 m (1,200 ft) wide at the widest point. The depth of gold mineralization beneath barren alluvial cover varies from about 3 m (10 ft) in the northeast part of the deposit where the Sandstorm Rhyolite has been partly removed by erosion, to a maximum depth of nearly 213 m (700 ft) at the southwest end of the deposit.

7.2.3 McMahon Ridge Deposit Area

Gold mineralization is hosted principally in the Milltown Andesite, and to a lesser extent in the underlying tuffaceous sediments of the Sandstorm Rhyolite of Ransome (1909). This unit is referred to as the Diamondfield Formation by MVG geologists in order to distinguish the shale beds from rhyolite flows. The deposit occurs in a generally east–west-striking, steeply south-dipping structural zone that is up to 213 m (700 ft) wide and may be spatially related to the northern margin of an intrusive-related ring-fracture system. Gold mineralization in the McMahon Ridge deposit is similar to that in the Goldfield Main district and, to a lesser degree, the Gemfield deposit. The gold-copper mineralization found in the McMahon Ridge and Gemfield deposits may be genetically related to the same gold–copper mineralizing event(s) that formed the bonanza ore bodies in the Goldfield Main district.

The gold deposit has a strike length of approximately 1,524 m (5,000 ft), which includes about 1,100 m (3,600 ft) along the main east–west trend and 430 m (1,400 ft) along the northeast-trending, northwest-dipping, Belmont fault zone. The mineralized zone consists of a number of steeply south-dipping to near-vertical and subparallel fault splays and has a vertical range of approximately 240 m (800 ft). The deposit width varies considerably both along strike and with depth ranging from about 76 m (250 ft) wide at the surface to less than 3 m wide at depths below about 180 m (600 ft).

High-grade zones in the deposit, while predominantly east–west oriented, are also hosted within northwest and northeast striking cross-structures.

8.0 DEPOSIT TYPE

The Gemfield, McMahon Ridge, and Goldfield Main deposits are structurally controlled, volcanic-hosted, epithermal gold deposits of the high-sulfidation, quartz–alunite type. Other examples of the deposit type include Paradise Peak (Nevada, USA), Summitville (Colorado, USA); Nansatsu (Japan), El Indio (Chile); Temora (New South Wales, Australia), Pueblo Viejo (Dominica), Chinkuashih (Taiwan), Rodalquilar (Spain), Lepanto and Nalesbitan (Philippines).

High-sulfidation systems of this type are commonly found in extensional and transtensional settings such as volcano-plutonic continent-margin and oceanic arcs and back-arcs. They commonly occur in zones with high-level magmatic emplacements where stratovolcanoes and other volcanic edifices are constructed above plutons.

Subvolcanic to volcanic calderas, flow-dome complexes, rarely maars and other volcanic structures; often associated with subvolcanic stocks, dykes, and breccias are the most common geological settings. High-sulfidation systems are postulated to overlie, and be genetically related to, porphyry copper systems in deeper mineralized intrusions that underlie the stratovolcanoes.

Host rocks are typically volcanic pyroclastic and flow rocks, commonly subaerial andesite to dacite and rhyodacite in composition, and their subvolcanic intrusive equivalents. Permeable sedimentary intervolcanic units can also be sites of mineralization.

Mineralization typically forms in veins and massive sulfide replacement pods and lenses, stockworks and breccias. Commonly, irregular deposit shapes are determined by host rock permeability and the geometry of ore-controlling structures. Multiple, crosscutting composite veins are characteristic.

The most common minerals within the quartz veins are pyrite, enargite/luzonite, famatinite, chalcocite, covellite, bornite, gold, and electrum. Deposits can also contain chalcopyrite, sphalerite, tetrahedrite/tennantite, galena, marcasite, arsenopyrite, silver sulfosalts, and tellurides including goldfieldite. Two types of ore are commonly present: massive enargite–pyrite and/or quartz–alunite–gold.

Most of the Goldfield district production has come from the high sulfidation quartz–alunite deposit type. These deposits are locally referred to as "ledges," which generally consist of one or more, moderately to steeply dipping, vein-like, silicified zones.

9.0 MINERALIZATION

9.1 District Mineralization

A majority of the gold and base metal production from the Goldfield district has come from high-grade ledges present in a relatively small, one square km area immediately north of the Goldfield townsite. This mineralization is localized in zones of strong silica-alunite alteration which are surrounded by wider zones of clay alteration. Smaller offshoots and splays of strong silicification are locally present in the clay altered zones.

Porphyritic rhyodacite and/or dacite of the Milltown Andesite and Sandstorm Rhyolite Formation are the principal host rocks for gold and locally copper mineralization. Older latitic volcanic rocks, the Morena Rhyolite, the Ordovician Palmetto Formation, and Jurassic quartz monzonite intrusive rocks also host mineralization locally. The gradation from high-grade silicified rock in "ledges" to very low-grade or barren silicified rock generally occurs over a distance as small as a meter, although some historic records indicate that there is no discernable contact between them. Gold grades are not distributed evenly throughout the ledges and instead occur as irregular sheets, pipes and shoots in and around ledges.

Goldfield district ores consist of native gold associated with bismuth and copper–arsenic–antimony-bearing sulfides and tellurides including bismuthinite, famatinite, enargite/luzonite, and goldfieldite. Fine native gold is often visible in the rich ores characteristic of the Goldfield Main district, although it also occurs as fine particles in base metal sulfides.

9.2 Goldfield Main

Ledges associated with gold mineralization are irregular masses of intensely silicified, brecciated wall rocks or intrusive dykes that occupy pre-existing, structurally controlled, hydrothermal fluid conduits. Where mineralized, the ledges are highly fractured and brecciated with late-stage silica and clay filling the open space. Gold mineralization is associated with this younger silica–clay event.

Mineralization historically mined in the Goldfield Main district and remnants still present strike mainly northwest or north to northeast and dip easterly. Mineralization has a strike length of over 1,550 m (5,000 ft) and extends down-dip over 520 m (1,700 ft). The majority of underground workings are within 150 m (500 ft) of the surface.

Hydrothermal alteration comprises weak propylitic, phyllic, argillic, quartz–alunite, and locally very intense silicification. An advanced argillic assemblage of diaspore and pyrophyllite is locally present. The hydrothermal alteration/mineralization sequence in the Goldfield Main district is similar to that interpreted for the McMahon Ridge deposit.

Goldfield Main district mineralization occurs primarily as native gold associated with bismuth and copper–arsenic–antimony-bearing sulfides and tellurides including bismuthinite, famatinite, enargite, and goldfieldite. Native gold reportedly was visible in the rich ores mined historically, although it is also known to occur as fine particles in sulfide minerals.

Mineralization remaining in the Goldfield Main area was not studied as part of this work, but is referred to in some detail in section 17.1 of a Technical Report on the Goldfield Project, Esmeralda County, Nevada, prepared by Mine Development Associates and dated September 30, 2002.

9.3 Gemfield

Gold mineralization is entirely contained within rhyolitic lavas of the Sandstorm Rhyolite. Pyrite is the dominant sulfide mineral. The Sandstorm Rhyolite is composed of strongly flow-banded, commonly glassy, but generally devitrified, porphyritic rhyolite.

Lava flows of the Sandstorm Rhyolite are almost always hydrothermally altered. Alteration types vary from unmineralized rock toward ore in the general sequence including propylitic, argillic, and intense silicification. The widespread distribution of hydrothermal alteration in the rhyolite is due to the highly permeable character of portions of the flow-banded volcanic stratigraphy. Formations above and below the rhyolite are generally only weakly altered and unmineralized.

The deposit has a known strike length of approximately 730 m (2,400 ft) and is 366 m (1,200 ft) wide at the widest point. The depth of gold mineralization beneath barren alluvial cover varies from about 3 m (10 ft) in the northeast part of the deposit where the Sandstorm Rhyolite has been removed by erosion, to a maximum depth of nearly 213 m (700 ft) at the southwest end of the deposit.

Low-grade, disseminated mineralization occurs in a halo of silica and clay alteration around the more intensely silicified ledges. This disseminated envelop developed as the result of high permeability in the rhyolite, whereas veins and ledges in other rock types have more restricted disseminated halos around the ledges.

Permeability in the Sandstorm Rhyolite appears to have been increased dramatically by a period of pre-mineral, acid leaching that developed fluid channels within the volcanic flow banding and pre-mineral structures.

Hydrothermal fluid-flow within the Gemfield deposit has been lateral and is stratabound within the flow-banded portions of the Sandstorm Rhyolite. The stratabound character of mineralization in the Gemfield deposit is in part due to the impermeable nature of the basal Vitrophyre of the Sandstorm Rhyolite.

The deposit is fault-bounded on at least three sides: east, west, and south. The bounding faults are clearly post-mineral, leaving unexplored down-dip extensions of mineralization to the northeast, southwest and northwest sides of the deposit. A representative section of geology and mineralization is provided as Figure 9-1.

9.4 McMahon Ridge

Gold mineralization is hosted principally by Milltown Andesite consisting of tuffs, flows and lahars. Mineralization in deeper drill hole intercepts is hosted by tuffaceous sedimentary rocks and black shales of the Diamondfield Formation.

Sulfides are dominantly pyrite. Hydrothermal alteration ranges from weak propylitic and argillic in unmineralized rocks to strong argillic and intense silicification in the mineralized zones. Mineralization is generally structurally controlled with the possible exception being the apparent stratabound character of mineralization in the Diamondfield Formation.

Gold mineralization most likely developed late in the sequence of hydrothermal alteration events, mainly because of the erratic distribution of gold grades with respect to silicification and ledge development.

A representative section of geology and mineralization is provided as Figure 9-2.

Figure 9-1: Typical Section through Gemfield Deposit

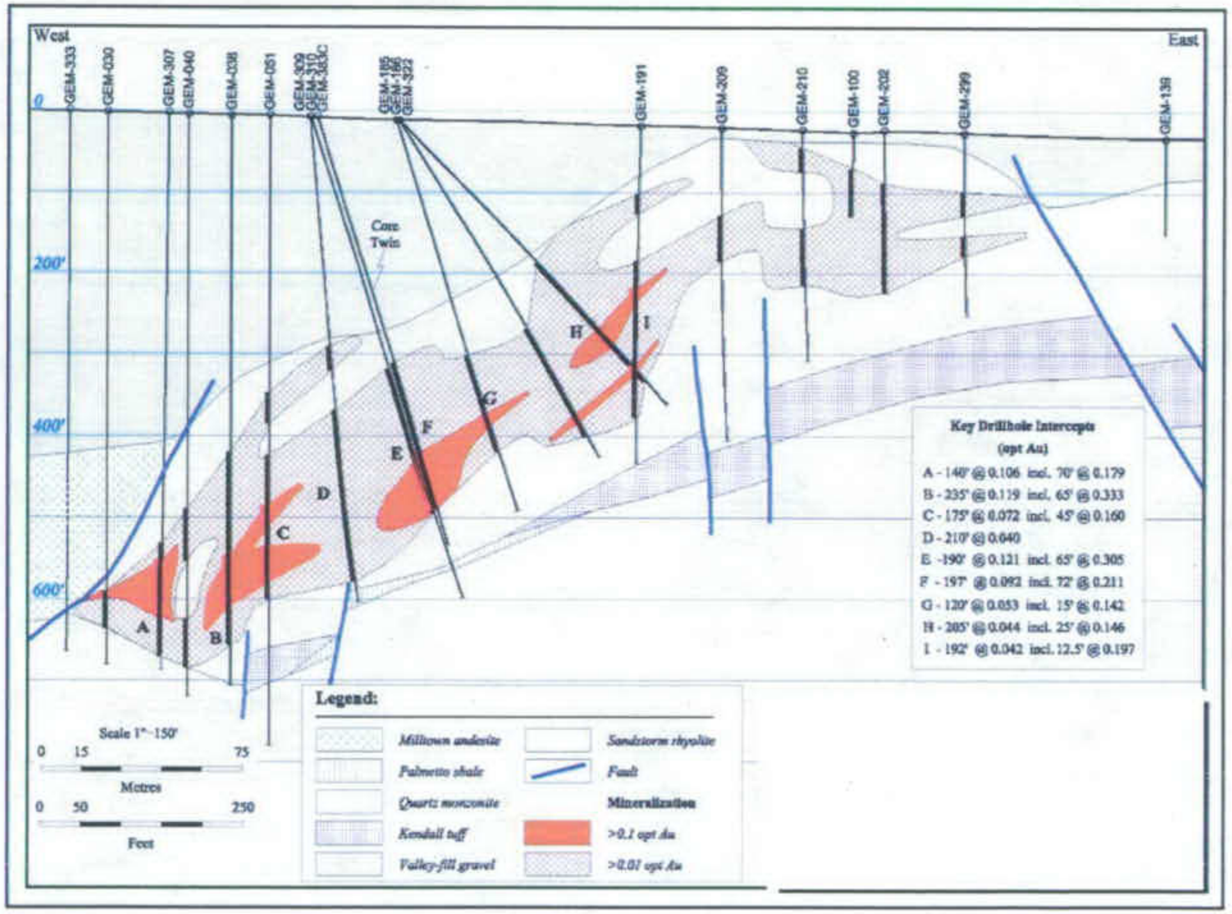
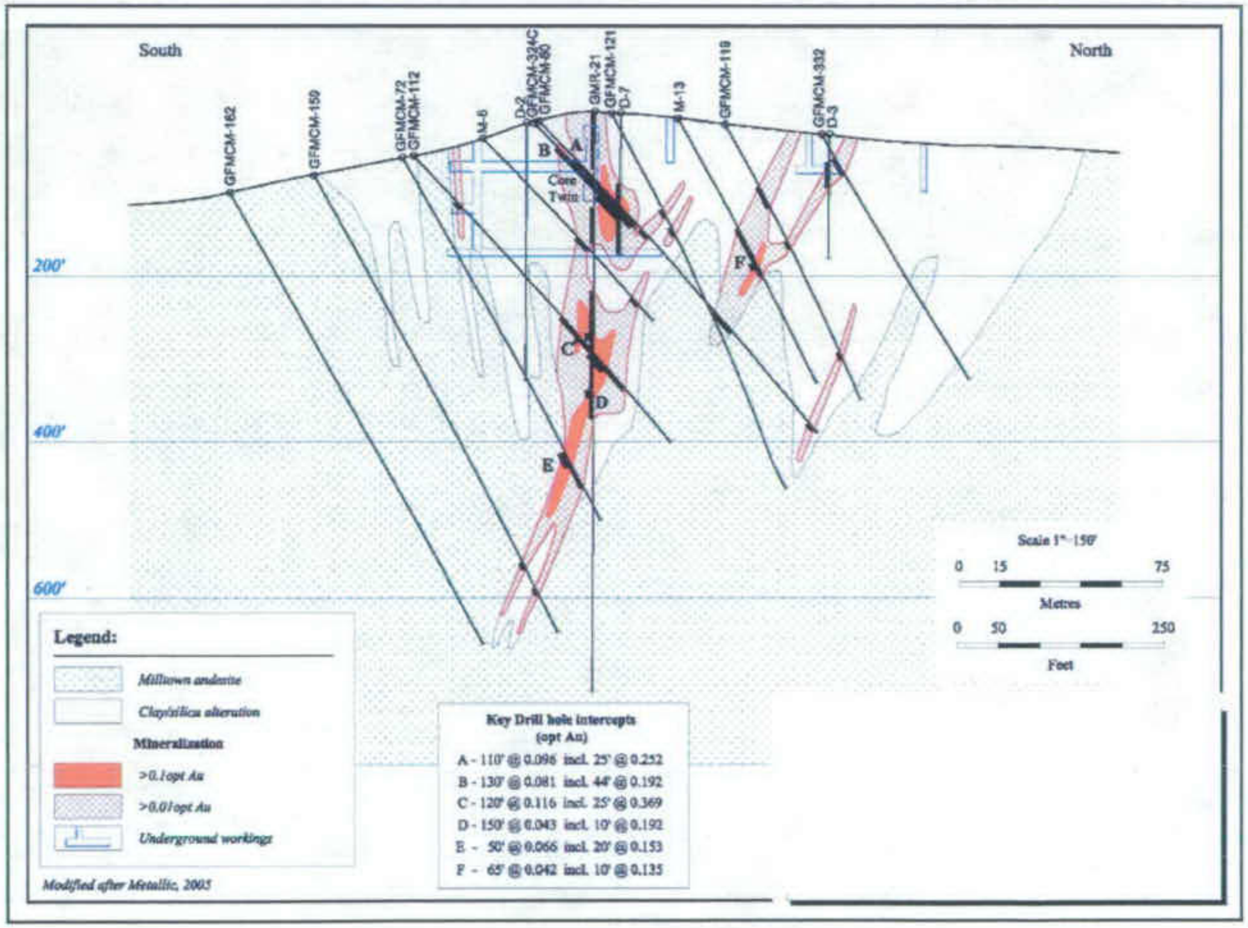


Figure 9-2: Representative Section through McMahon Ridge Deposit



10.0 EXPLORATION

10.1 Historical Exploration

Goldfield Consolidated Mining treated almost 3,000,000 tons of ore grading 1 oz/st Au between 1908 and 1920. It reported 93% to 94% recovery from its stamp mill operation.

The Gemfield deposit was discovered by Kennecott in 1992, is located under shallow, unmineralized alluvial cover, and is the only significant gold resource discovered in the Goldfield mining district since the Jumbo Extension boom in 1914.

10.2 2001 MVG Exploration Program

MVG began exploration in the Goldfield district in May 2001. The southeast part of the district was the initial target, and exploration included a combination of geological mapping and geochemistry. Six previously unrecognized drill targets were defined, each located along a major east-southeast trending structural zone that connects with the Goldfield Main area mineralization on its southeast side. Other work included:

- detailed geological mapping and geochemical sampling in the Jumbo open pit
- district-scale geological mapping from the McMahon Ridge -Black Butte area eastward along the northeast extension of the highly prospective ring-fracture zone
- detailed geological mapping completed in a number of other areas mainly in the south-eastern part of the district
- approximately two line-miles of soil gas geochemistry in the northwestern part of the district.

10.3 2002 MVG Exploration Program

In 2002, the company completed 22,450.2 m (73,654.6 ft) of RC drilling and 736.6 m (2,416.6 ft) of diamond drilling in 203 holes. Of these holes, 158 were located at McMahon Ridge, 17 holes were collared in the Goldfield Main area between the Red Top and Combination open pit mines, and 28 RC holes were collared in the Gemfield deposit.

Infill drilling between existing Romarco and other operator drill holes was performed at McMahon Ridge in Phase I. A Phase II program consisted of a combination of additional infill and step-out drilling at McMahon Ridge. A total of eight diamond drill holes were drilled in the project area. All were drilled as twins of existing RC holes, five in the Goldfield Main area and three on McMahon Ridge.

The Phase I McMahon Ridge drilling established nominal 30 m (100 ft) drill hole spacing in the central part of the deposit area. The Phase II program consisted of 12,430 m (40,780 ft) of additional RC drilling. This program added an additional 1,036 m (3,400 ft) to the known strike of the McMahon Ridge deposit, giving it a total length of 1,460 m (4,800 ft). Results of previous work were confirmed.

10.4 2003 MVG Exploration Program

From March to December 2003, MVG drilled 373 holes for a total of 49,279.8 m (161,666 ft). Fifty-eight holes (54 RC and 4 metallurgical cores) were drilled at McMahon Ridge. A total of 193 holes (187 RC and six metallurgical cores) were drilled at Gemfield. McMahon Ridge and Gemfield core holes served to a certain extent as twins of previous RC holes. A total of 94 RC holes tested other exploration targets and 28 RC holes were drilled for condemnation of haulage roads and waste dump or process facility sites.

The McMahon Ridge RC drilling succeeded in enlarging the mineralized zone. MVG then developed a new geological interpretation to include the additional resources.

The Gemfield RC program was designed to reduce nominal drill hole spacing to about 30 m (100 ft) and to provide close-spaced geological data for development of a geological model. Drilling located additional high-grade mineralization and better defined the geometry of the central "ledge", as well as splays and offshoots of high-grade mineralization off the northeast and southwest edges of the deposit.

Ten RC holes were drilled on the Tom Keane prospect in the extreme southeast portion of the property. This area had seen a small amount of historic production and was a target for additional mineralization along the East Goldfield Structural zone. Hole TK-5 encountered 1.03 g/t Au (0.03 oz/st) over 44.2 m (145 ft), including 1.71 g/t (0.05 oz/st) over 7.6 m (24.9 ft). Hole TK-6 found 2.88 g/t Au (0.084 oz/st) over 22.9 m (75.1 ft), including 8.23 g/t (0.24 oz/st) over 4.6 m (15.1 ft).

10.5 2004 MVG Exploration Program

MVG drilled 76 RC holes between January and March 2004, totaling 14,347 m (47,070 ft).

Twenty-five infill holes were drilled at McMahon Ridge. These were in part designed to confirm zone continuity and improve the geological model. Assays similar to previous holes were obtained.

Twelve deep holes were drilled at Goldfield Main (Jumbo Extension target area) where high-grade intercepts had been reported in the early 1900s. A total of 39 condemnation holes were drilled in the historic Adams mine area between the McMahon Ridge and Gemfield deposits.

Metallurgical test work was undertaken on core and RC cuttings from some of the holes.

10.6 2005 MVG Exploration Program

During 2005, MVG continued geological compilation and interpretation, together with metallurgical review. A total of 14 RC holes were sited at Gemfield in December 2005, for 1,920 m (6,300 ft). The drill program was designed to explore for extensions of mineralization in six separate areas outside the known Gemfield gold resource area. Results of this program show that the deposit still has potential for the discovery of addition gold reserves beyond the limits of the current resource.

10.7 2006 MVG Exploration Program

In June 2006, a small RC drilling program, of 10 holes totaling 725 m (2,380 ft) was undertaken. The drilling program was located within the Gemfield deposit and was intended to clearly define continuity of gold mineralization in a near surface block for use in this preliminary assessment report; shallow, high-grade, near-surface intercepts were reported.

10.8 Other Work

Other work by MVG personnel and consultants was performed from 2002 to 2005, to support public disclosure of mineral resources. MVG engaged Mine Development Associates (MDA) to review the Goldfield project in 2002 to support MVG's Initial Public Offering. In late 2002, MDA prepared mineral resource estimates compliant with CIM Standards and Definitions (in accordance with NI 43-101) for the McMahon Ridge, Gemfield, and Goldfield Main deposits. At the same time, MDA audited the historic "mineral resource" prepared for a previous owner, Kennecott, by Mineral Resource Development Inc. (MRDI, now owned by AMEC) in 1996 and stated that it was compliant with CIM Standards and Definitions as required by NI 43-101.

MVG undertook a considerable amount of additional drilling on Gemfield and McMahon Ridge after MDA's work. This work comprised mostly infill drilling at Gemfield and step-out drilling at McMahon Ridge. MVG then evaluated all drilling results and prepared geological interpretations to support revised resource estimates. New mineral resource estimates were prepared in 2005 by MVG staff for Gemfield and McMahon Ridge. During this process, MVG commissioned Watts Griffis and McOuat (WGM) to audit the new resource estimates and prepare a Technical Report conforming to NI 43–101F1 to support public disclosure of the estimates. The report was completed and filed on SEDAR July 12, 2005. The resources as cited in the Technical Report have an effective date of April 2005, and are presented in Table 7-1 for Gemfield, and Table 7-2 for McMahon Ridge. Inferred resources are in addition to Measured and Indicated Resources in both tables. These estimates are provided for reference only. AMEC has applied more conservative criteria for classification of resources than used by WGM.

Table 10-1: Gemfield Mineral Resource Estimate, April 2005 (after WGM)

Classification	Tons	Au Oz/st	Au Contained Oz
Measured	12,782,000	0.037	475,000
Indicated	4,071,000	0.016	66,000
Measured + Indicated	**16,853,000**	**0.032**	**541,000**
Inferred	1,001,000	0.022	22,000

Note: Based on a 0.010 troy oz Au/short ton cutoff and 3.00 oz Au/short ton top cut, derived from a study of the cumulative probability plots.

Table 10-2: McMahon Ridge Mineral Resource Estimate, April 2005 (after WGM)

Classification	Tons	oz Au/t	Contained oz Au
Measured	4,087,000	0.043	177,000
Indicated	4,113,000	0.026	108,000
Measured + Indicated	8,200,000	0.035	285,000
Inferred	171,000	0.019	3,000

Note: Based on a 0.010 troy oz Au/short ton cutoff and 3.00 oz Au/short ton top cut, derived from a study of the cumulative probability plots.

11.0 DRILLING

11.1 Drilling

About 1,700 holes were drilled in the Goldfield district by other companies prior to MVG's involvement. Most holes were conventional rotary and RC, with a minor amount of diamond core. Approximately 175 RC holes were drilled on the Gemfield deposit prior to MVG. Pre-MVG drilling at McMahon Ridge included approximated 100 RC holes. Limited down-hole surveys are available for the historical holes and most of these are dip and not azimuth measurements. To adjust for the lack of survey data in old holes, MVG developed a series of theoretical deviation factors based on drill hole orientation. MVG then applied these factors to unsurveyed historical holes to improve the confidence in the location of drill hole intercepts and geological contacts in support of resource estimates. AMEC believes that this approach is superior to using straight-line drill hole trajectories.

MVG has drilled 497 RC exploration holes totaling 60,754 m (199,322 ft) on the Gemfield, McMahon Ridge and Goldfield Main deposits. A further 161 RC holes totaling 26,271 m (86,190 ft) were drilled on other exploration targets or for condemnation of proposed infrastructure sites. Eklund Drilling Company of Elko, Nevada, has provided most of the RC drilling for MVG, normally using either a Foremost MPD 1500 track-mounted rig or a Foremost Explorer 1500 rubber-tired rig. One to two rigs operated concurrently. Hackworth Drilling Company Inc. drilled 24 holes at McMahon Ridge in 2002 using a Foremost MPD-1000 track-mounted rig.

MVG has drilled 18 diamond core holes totaling 1,695 m (5,561 ft), mostly for metallurgical tests. Boart Longyear's Core Drilling Division based in Carson City, Nevada provided core drilling services. Core sizes have been HQ (63.5 mm diameter) and PQ (85.0 mm diameter). Core holes were in some cases pre-collared in unaltered intervals by an RC rig. Diamond core drilling was performed 24 hours a day and RC drilling one day shift, with 10–12 hours per shift. Normal drill periods were 10 days on and 4 days off.

Kennecott Exploration drilled ten RC pre-collared diamond core holes in the Gemfield deposit totaling 1,621 m (5,318 ft) after the discovery of the deposit in 1992. All of the technical information generated from these holes has been incorporated in the current Gemfield resource model.

Table 11-1 lists drilling data totals for holes drilled in the Goldfield district since the mid-1970s. Specific drill totals are listed for each of the MVG campaigns by area.

Drill collar coordinates have been acquired using geodetic-grade global positioning systems (GPS) since Romarco's involvement with the Goldfield project in 1998. Hole collar coordinates prior to 1998 were probably determined using an Electromagnetic Distance Measurement (EDM) tool. MVG has verified the coordinates for a majority of the hole collars completed prior to their involvement at both Gemfield and McMahon Ridge using the GPS method.

Downhole surveys of holes drilled by Kennecott, Romarco, and MVG were acquired by a contract survey company using a gyroscopic system beginning in January 1993.

Table 11-1: Goldfield District Drilling

Description or Location	Year Drilled	Drill Hole Type	Number of Holes	Total Drilling (m)
Pre-MVG	N/A	RC	1,657	182,749
	N/A	DD	38	10,787
Sub-total Pre-MVG			***1,695***	***193,536***
MVG	2002	RC	155	16,709
McMahon Ridge	2002	DD	3	324
	2003	RC	54	7,750
	2003	DD	4	225
	2004	RC	25	3,603
Sub-total McMahon Ridge			***241***	***28,615***
Gemfield	2002	RC	28	3,248
	2003	RC	187	21,246
	2003	DD	6	632
	2005	RC	14	1,920
	2006	RC	10	725
Sub-total Gemfield			***245***	***27,771***
Goldfield Main	2002	RC	12	1,655
	2002	DD*	5	514
	2004	RC	12	3,898
Sub-total Goldfield Main			***29***	***6,067***
Other Expl. & Condemnation	2003	RC	122	19,425
Condemnation	2004	RC	39	6,846
Sub-total Expl. & Condemnation			***161***	***26,271***
Sub-total MVG			***676***	***88,724***
Grand Total			***2,371***	***282,260***

Note: * Holes were RC pre-collared

Core drilling recoveries have averaged 91.7% according to MVG.

Figures 11-1 and 11-2 show the locations of drill holes and provide an indication of drilling density for the Gemfield and McMahon Ridge deposits respectively. Figure 11-3 shows those holes completed during 2005, whereas Figure 11-4 shows the location of the 2006 drilling.

11.2 AMEC Evaluation of Drilling

The drill hole data review undertaken by AMEC only evaluated data through 2005, up to drill hole GEM-399 at Gemfield and drill hole GFMCM-349 at McMahon Ridge.

Figure 11-1: Gemfield Deposit – Drill Hole Locations pre-2005

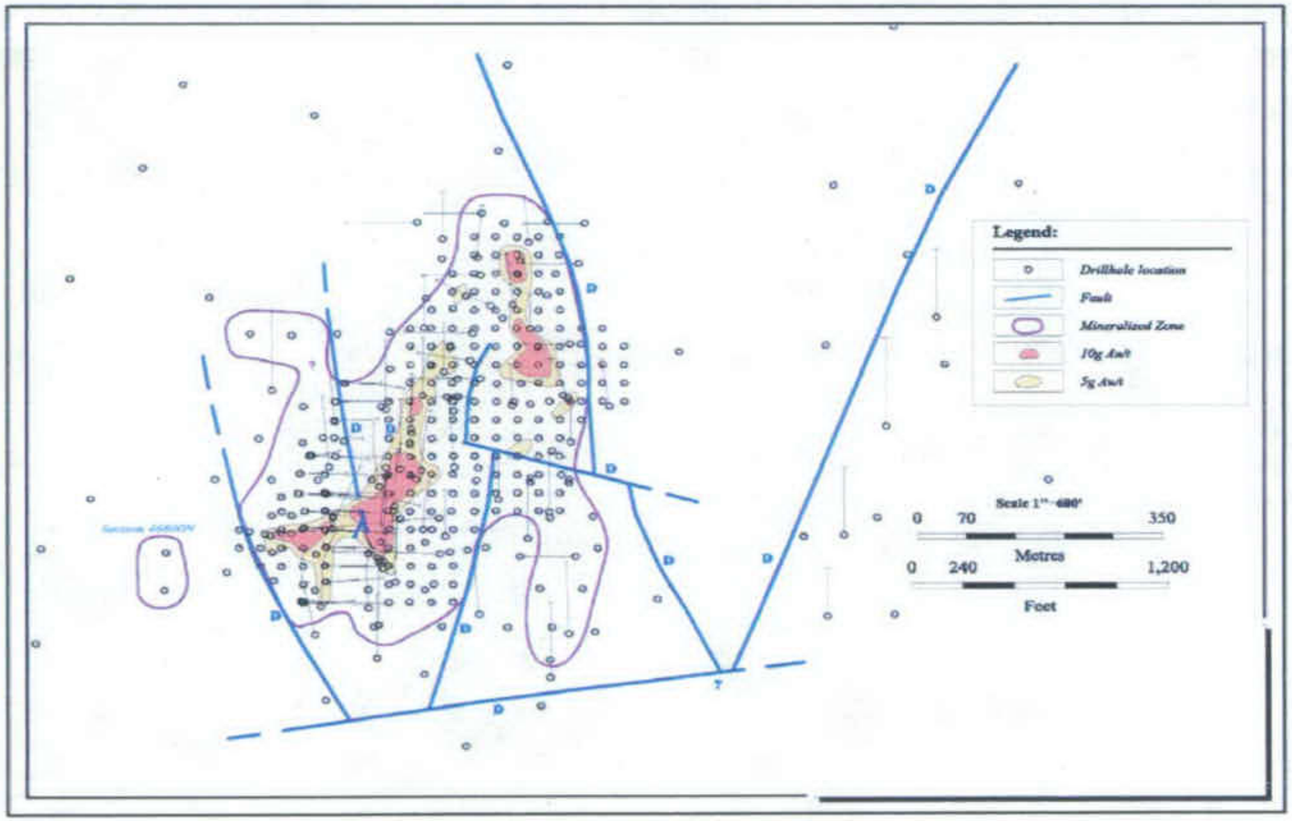


Figure 11-2: McMahon Ridge Deposit – Drill Hole Locations

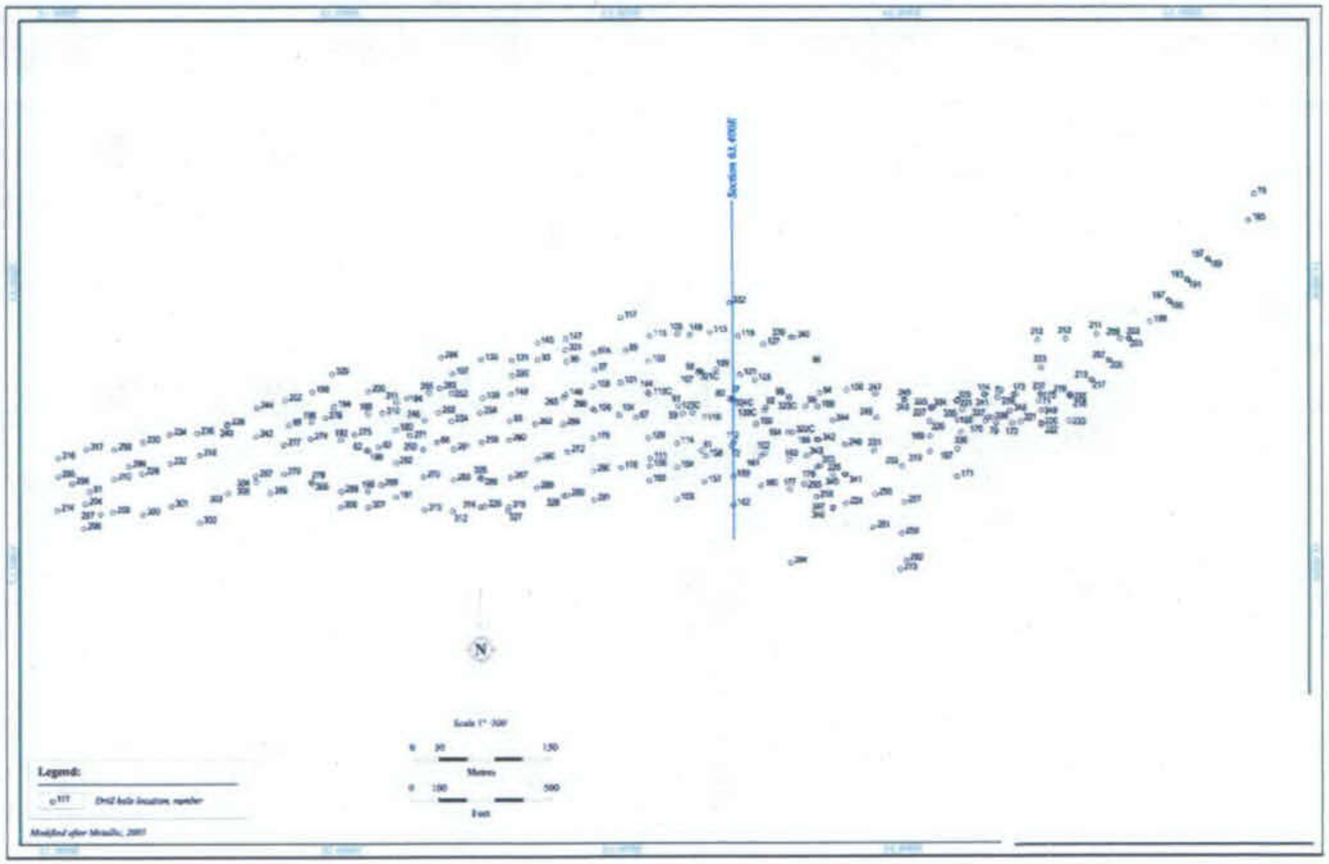


Figure 11-3: Gemfield Deposit – Drill Hole Locations 2005 Program

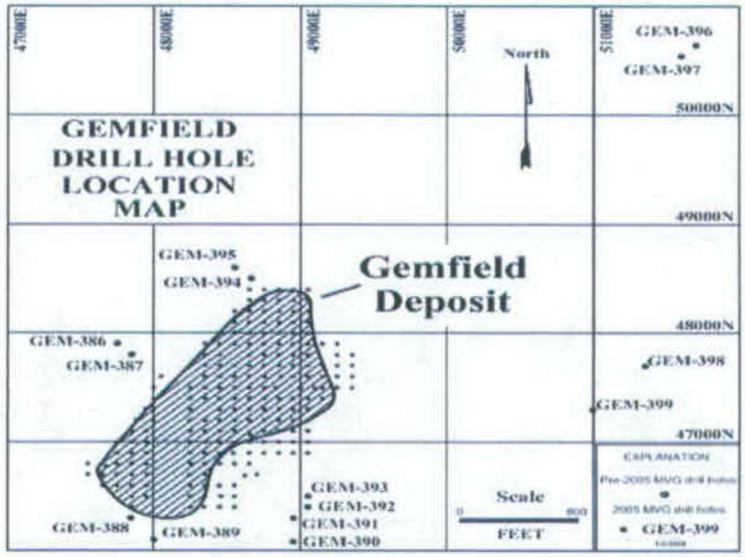
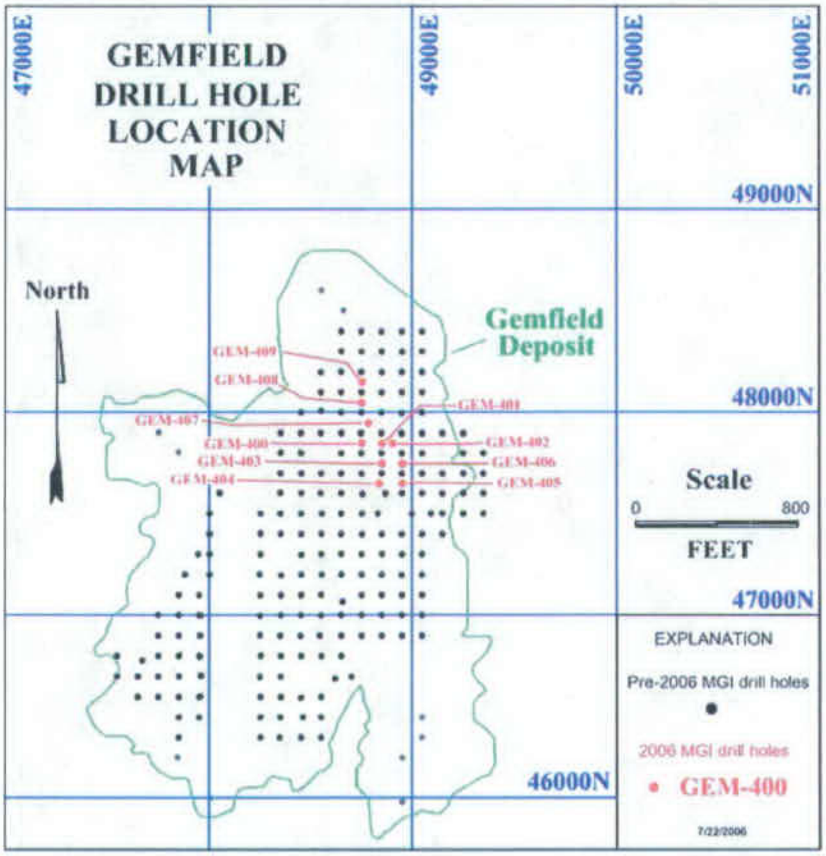


Figure 11-4: Gemfield Deposit – Drill Hole Locations 2006 Program



12.0 SAMPLING METHOD AND APPROACH

12.1 Core Handling and Logging Protocols

12.1.1 RC Drilling

Procedures for pre-MVG and Romarco RC holes are not known for certain, but it is assumed that practices were normal for the industry at that time. Eklund is a well-established drilling contractor with experience drilling Nevada gold deposits going back more than 30 years.

RC chip logging and handling procedures were similar for all MVG periods of drilling. MVG geologists logged RC cuttings. The first 20 m of each hole was generally drilled dry. Environmental regulations for dust suppression mandated drilling with water injection for the remainder of each drill hole. Wet RC cuttings were split at the drill rig using a rotary wet splitter. A geologist was assigned to each rig to ensure samples did not overflow the collection bucket, thereby preventing the loss of fines from the sample. Where high ground water flow was encountered, the overflow was collected in an oversized rubber tub and a flocculent was used to settle the fines. Once the fines had settled, the water was decanted from the overflow tub and the fines added to the sample.

Geologists also collected a representative portion of the chip sample from the reject material for each sample and placed these in covered plastic trays. Plastic trays are stored in a MVG facility in Goldfield. Lithology and alteration was logged as the interval was drilled.

12.1.2 Core Drilling

MVG geologists logged all core holes. The core was first digitally photographed, then logged for alteration, mineralization, and lithology. Sampling was performed after completion of the logging.

Logs were recorded on paper sheets, and subsequently transferred by hand entry into Excel® and then imported into the Gemcom® database.

12.2 Sampling Methods

12.2.1 Reverse-Circulation Drilling

RC drill samples are collected by MVG every 1.5 m (5 ft) after passing through a cyclone attached to the drill rig. The drill rods are 6 m (20 ft) long; thus, there are 4 samples collected per drill rod. Fifteen RC drill holes were partially sampled using a sample interval length of 76 cm (2.5 ft). The closer-spaced sampling generally corresponds to the portion of the drill hole containing significant gold grades.

Dry samples are split using a Jones riffle splitter at the drill site, to a mass between 5 and 7 kg (11-15 lbs). Wet samples were split by a rotating splitter set to acquire a sample with a dry sample mass between 5 and 7 kg. Excess water was allowed to filter out of the sample bag prior to shipment to the assay lab.

Nearly all samples collected were assayed. At Gemfield, samples of younger overburden (Siebert Formation or Mira Basalt post-mineral cover) were not assayed. RC cuttings of overburden at Gemfield were either not collected or they were discarded after the pre-mineral contact was established.

Down-Hole Contamination

Some apparently mineralized RC sample results were excluded from the resource database because MVG judged there was a risk of over-estimating gold grades due to down-hole contamination. This includes lower portions of 15 drill holes in Gemfield and 8 drill holes in McMahon Ridge.

It is well known that RC drilling is vulnerable to down-hole contamination. Contamination occurs when material carrying the element of interest is introduced into a sample from an unintended source. This can occur after the drill penetrates gold-bearing rock. Dilution can occur when barren material is introduced into a sample obtained from a mineralized intercept particularly when barren overburden becomes unstable at the collar of a drill hole. If the gold-bearing rock caves, portions of it can fall to the bottom of the drill hole. The sampling is most vulnerable to down-hole contamination after a drill rod is added, after drill bits are changed, and after other events that destabilize the drill hole and cause caving. Contamination events are much more probable during wet drilling, particularly when there are high water flows, because of the washing effect of the water.

The drill operator can reduce the probability of down-hole contamination through the use of polymers and drilling muds that stabilize the drill hole, cleaning the drill hole after adding a drill rod but before commencing sampling, and through operational settings of the drill that reduce stress on the drill hole walls.

There are no direct methods for detecting down-hole contamination. Large caving events can sometimes be detected if RC drilling recovery is monitored; these appear as anomalously elevated drilling recoveries. However, like many RC drilling campaigns in North America, RC drilling recovery was not monitored. Possible contamination events can be inferred from patterns of elevated gold grade corresponding to drill rod additions (known as *cyclicity*) and by asymmetric distribution of gold grades around a high grade intercept, such that the grades below the intercept are much higher than the gold grades above it (known as *decay*).

MVG geologists examined the RC drill-hole assay results for evidence of decay and cyclicity and identified intervals in the lower portions of 23 drill holes that potentially were at risk (Table 12-1). These intervals were coded in the resource model as having no data.

Table 12-1: MVG List of Potentially Contaminated RC Intervals

Hole ID	Number of Samples Deleted	Depth of 1st Deletion (ft)
GEM-070	29	470
GEM-075	23	485
GEM-098	27	460
GEM-118	36	400
GEM-128	3	70
GEM-157	21	630
GEM-179	20	300
GEM-180	22	290
GEM-183	24	445
GEM-187	29	440
GEM-268	21	85
GEM-310	20	520
GEM-337	22	515
GEM-346	16	605
GEM-351	4	525
GFMCM-114	10	550
GFMCM-163	9	455
GFMCM-164	3	385
GFMCM-186	16	270
GFMCM-192	9	205
GFMCM-246	11	245
GFMCM-262	8	425
GFMCM-343	4	380
Total	**387**	

AMEC performed an independent check for cyclicity and decay. RC drill holes in Gemfield and McMahon Ridge were selected for evaluation if they included at least one interval with gold grades greater than 3 g/t Au. Drill rod numbers and rod positions were assigned, based on the assumption that rod Position 1 of Rod 1 corresponds to a depth of 5 feet (i.e. the interval 5 to 10 feet is Rod 1, Position 1). The next rod starts 20 feet down from this position. AMEC assigned to each 5-foot RC drill hole sample a position number of 1, 2, 3 or 4, with Position 1 corresponding to the first sample after the addition of a new drill rod. Fifteen drill holes were partially sampled on a 2.5 foot interval length, providing 8 rod positions per drill rod instead of 4. These drill holes were evaluated separately.

AMEC determined the highest gold grade in each group of four samples associated with the same drill rod. Sequences of three or more drill rods that have the highest gold grade (of the 4 results for that rod) in rod Position 1 were marked for further examination.

To analyze decay, AMEC located local maxima in each drill hole by first determining intervals with gold grades greater than 3 g/t Au, then searching for the highest gold grade within the associated drill rod, and the rods immediately preceding and following. These local maxima Au grades were then combined with either the sample interval immediately preceding or following, whichever was higher in grade, to obtain a 3 m (10 ft) interval with a composite grade. Two 3 m composites above and below each of these intervals were then compared. If both the 3 m composites below the interval were higher in grade than their counterparts above the interval, the group of samples was considered to show possible decay.

AMEC visually reviewed all the flagged results and discarded those where down-hole contamination was probably occurring, but in negligible amounts that would not affect estimates of the grade. A list of discarded drill hole intervals is shown in Table 12-2. The number of samples is overstated for some drill holes because in some cases, separate flagged segments of drill holes have a mineralized intercept that lies between them, which is not rejected.

There is some overlap between the drill hole segments identified by MVG geologists and those identified by AMEC. It is to be expected that the two lists will not match because the approaches used were independent and there is no widely agreed upon approach for judging which RC intervals present sufficient risk for exclusion. Both lists likely have some exclusions that are not warranted, as well as some which should be added. The best selection probably includes all of the drill holes that appear on both lists, plus some, but not all, of those drill holes appearing on only one of the two lists.

A plot of a portion of GEM-070 is shown in Figure 12-1; this drill hole appears on both lists. There is a sequence of four drill rods that have a markedly higher grade in rod Position 1. This is very unlikely to occur by chance (1 out of 256 possible outcomes). Figure 12-2 shows the portion of drill hole GEM-075 that MVG identified as probably contaminated but AMEC did not identify in its independent evaluation. Finally, Figure

12-3 shows the portion of GEM-038 that AMEC considered to show potential contamination that was not identified by MVG.

AMEC considers MVG's exclusions acceptable for the present level of work conducted on the deposit. Patterns in gold grades downhole that resemble decay and cyclicity can be the result of actual changes in grade through a deposit such as a gradual decrease in grade below a high-grade ledge. For this reason, the drill logs of the identified holes should be reviewed to determine if these patterns are supported by the geology rather than being the result of decay and cyclicity.

Table 12-2: AMEC List of Potentially Contaminated RC Intervals

Hole ID	From	To	Number of Samples
Gemfield			
GEM-038	465	665	40
GEM-043	145	205	12
GEM-046	445	505	12
GEM-070	465	585	24
GEM-106	405	465	12
GEM-117	445	525	16
GEM-136	165	300	27
GEM-151	745	825	16
GEM-178	305	365	12
GEM-179	245	345	20
GEM-206	105	225	24
GEM-251	85	225	28
GEM-258	105	225	24
GEM-317	325	385	12
GEM-337	505	585	16
GEM-344	445	505	12
GEM-345	405	525	24
Total			**331**
McMahon Ridge			
GFMCM-061	125	325	40
GFMCM-080	145	565	84
GFMCM-144	145	225	16
GFMCM-148	165	225	12
GFMCM-169	325	565	48
GFMCM-176	145	505	72
GFMCM-178	525	665	28
GFMCM-185	65	125	12
GFMCM-246	205	285	16
GFMCM-259	165	565	80
Total			**408**

Figure 12-1: Cyclicity shown in GEM-070

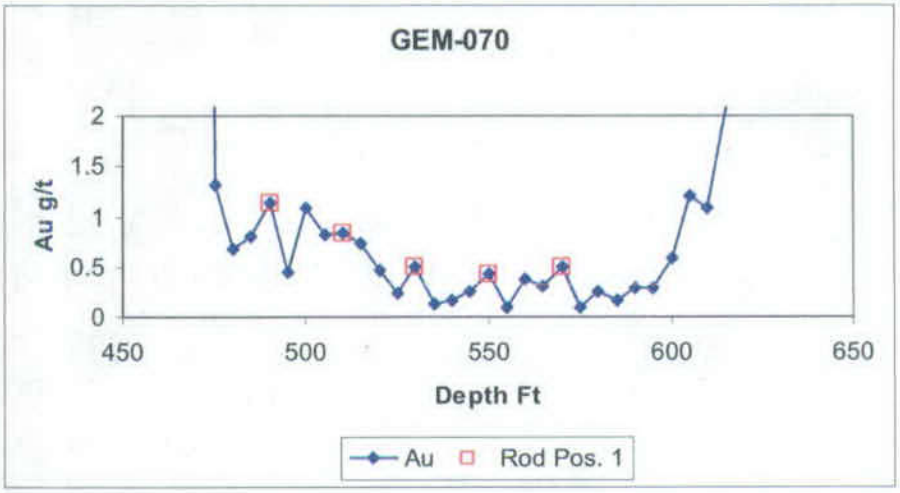


Figure 12-2: Portion of GEM-075 Excluded by MVG

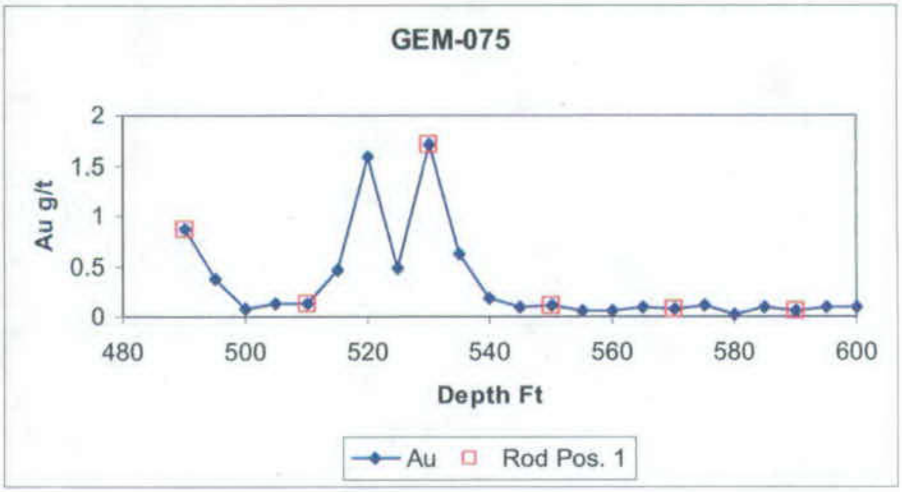
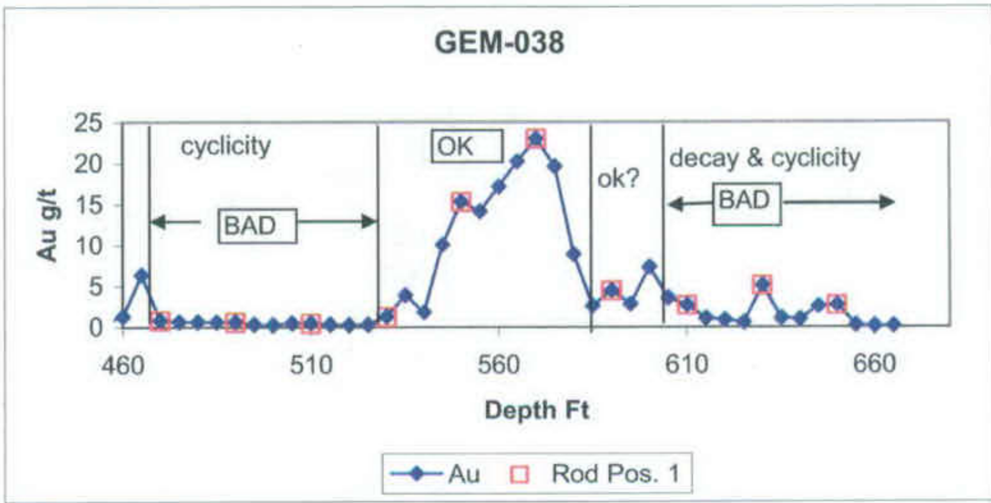


Figure 12-3: AMEC-Identified Portions of GEM-038 with Possible Down-Hole Contamination



12.2.2 Core Drilling

There are a total of 24 core drill holes in the two deposits: 16 in Gemfield and nine in McMahon Ridge.

Six core holes in Gemfield are PQ size (85 mm diameter) and were drilled by MVG. Ten core holes in Gemfield are HQ size and were drilled by Kennecott Exploration One of the core drill holes in McMahon Ridge area was drilled by the U.S. Geological Survey, but it encountered no gold mineralization. One HQ size core hole in the McMahon Ridge area was drilled by North Limited. MVG drilled the seven other core holes in McMahon Ridge: three are HQ size (63.5 mm diameter) and four are PQ size (85 mm diameter).

In addition to the core holes described above, there are ten drill holes at Gemfield that start as RC drill holes and end as HQ core holes (Kennecott holes). Core drilling makes up a very small percentage of the drilling and was chiefly intended for obtaining rock for metallurgical test work and validating RC drill holes.

Thirteen core holes drilled by MVG are twins of RC drill holes; 6 in Gemfield and 7 on McMahon Ridge. The collar separation distances of these twins range from approximately 1.5 to 4.6 m (5 to 15 ft). Results of RC-Core twin hole comparisons are discussed later in this report.

The geologist marks the sample interval based on mineralization present and observed geological and alteration information. Samples vary in length from less than 0.5 m (1.5 ft) to 2.0 m (6.6 ft) or more, which occasionally occurs for intervals visually identified to be unmineralized. Core samples, particularly of mineralized intervals, average somewhat less than 1.5 m (4.9 ft). All reject materials from these cores are retained for future analyses.

The core drilled in 2003 for metallurgical test work was not split, and was submitted in its entirety to KCA. KCA performed the initial assay work, and then AAL was used for check assays and multielement geochemistry on splits from the original KCA sample pulps. Core from the 2002 McMahon Ridge drill campaign was split in half using one of three splitting techniques: competent core material was split with a diamond saw; very hard (typically silica ledge rock) was split with a hand-operated hydraulic core splitter after first scribing a shallow cut with the diamond saw to align and secure the core in the hydraulic core splitter; very soft core was divided in half with a square trowel and one side of the interval was scooped out and bagged.

Samples are identified with pre-printed sample tags from sample books; one tag is placed with the archived core and a duplicate tag accompanies the submitted core sample. Bagged half-core samples are picked up by ALS Chemex and transported to their laboratory (lab) in Sparks, Nevada. The remaining half-core is stored in a secure steel container at MVG's Merger Shaft sample storage facility.

Most of the core is assayed, with the exception of the younger overburden at Gemfield, which is retained for geotechnical measurements and acid-base accounting analyses.

12.3 Recommendations

AMEC recommends that MVG further evaluate down hole contamination in the RC drill holes prior to undertaking more detailed resource estimation. Patterns in gold grades downhole that resemble decay and cyclicity can be the result of actual changes in grade through a deposit such as a gradual decrease in grade below a high-grade ledge. For this reason, the drill logs of the identified holes should be reviewed to determine if these patterns are instead supported by the geology.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1.1 Sample Preparation

MVG performs no sample preparation beyond some core splitting. For RC holes, MVG riffle splits the dry RC chip samples; wet RC samples are passed through a rotary splitter.

ALS Chemex of Reno supplied assaying services from 2001 through February 2003. AAL has been the principal assay laboratory since then. Florin Analytical Services LLC (FAS; a subsidiary of KCA), BSI Inspectorate of Sparks (ISO 9001:2000 accredited) and ALS Chemex, Reno and Vancouver provide check assays. FAS performs much of the assay work for KCA, who provided metallurgical testing services for the project, and performed most of the check assay work. FAS is seeking ISO 9001:2000 accreditation.

Wet samples are dried. All samples are passed through a jaw crusher to produce a nominal -10 mesh size (likely about 70 percent passing 2 mm). The -10 mesh material is then passed though a Jones riffle splitter to obtain a 200 to 400 g split for pulverization to 90% passing -150 mesh (106 microns) using a ring grinder. Barren rock is run through both the jaw crusher and pulverizer between samples to prevent cross-contamination between samples.

13.1.2 Assaying

At AAL, which is ISO/IEC 17025 certified (and previously at ALS Chemex, which is ISO 9002 accredited), 30 g pulp samples are analyzed for gold by fire assay with an atomic absorption ("AA") finish. Samples returning grades exceeding 10 g/t Au are re-assayed with a gravimetric finish, which is more accurate for higher-grade samples. Gold-mineralized intervals exceeding about 100 ppb Au are subsequently assayed for silver by aqua regia digestion and AA analysis. In some cases, samples from mineralized intervals are later analyzed using an Inductively Coupled Plasma ("ICP") multi-element analysis method.

13.2 Security

RC samples are collected at the drill rig by a sampling technician who works for the drilling contractor. Samples are placed in sample bins which measure 1.22 m by 1.22 m by 0.76 m deep (4 ft by 4 ft by 2.5 ft deep). Up to four bins are carried on a sample trailer, which stays with the drill rig until full. Full sample bins are transported to the MVG storage yard and unloaded with a fork-lift to await pickup by assay lab personnel.

For drill core, core boxes are collected at the drill rig on a daily basis and transported to the MVG storage yard. Samples are stored behind a locked gate at the former Merger Mine site in the Goldfield Main area. There is little opportunity for anyone to tamper undetected with the samples at any step in the shipping, preparation and assaying process.

13.3 Assay Quality Assurance and Quality Control

The assay quality data review undertaken by AMEC only evaluated data through December 2005, which included up to drill hole GEM-399 at Gemfield and drill hole GFMCM-349 at McMahon Ridge.

13.3.1 Quality Control Coverage

The (QC) data available for assays from campaigns prior to the Romarco campaigns, has not been evaluated. AMEC reviewed the QC data available in the MVG office, which predominantly covers the MVG drill campaigns The MVG campaigns have extensive quality control coverage, in the form of reported AAL duplicate results on selected samples in each report, and from a check assay program that re-submitted coarse reject samples corresponding to mineralized intercepts, as identified by MVG geologists.

Table 13-1 summarizes the drilling campaigns at Gemfield. Solely for this statement of QC coverage, AMEC defined mineralized intervals as any assayed interval with a gold grade (as stated in the 'model' field of assay database) greater than 0.02 oz/st Au (0.69 g/t Au). About 60% of the mineralized drill holes and mineralized intervals in the resource model are from MVG drilling, and are therefore covered by its check assay QC program.

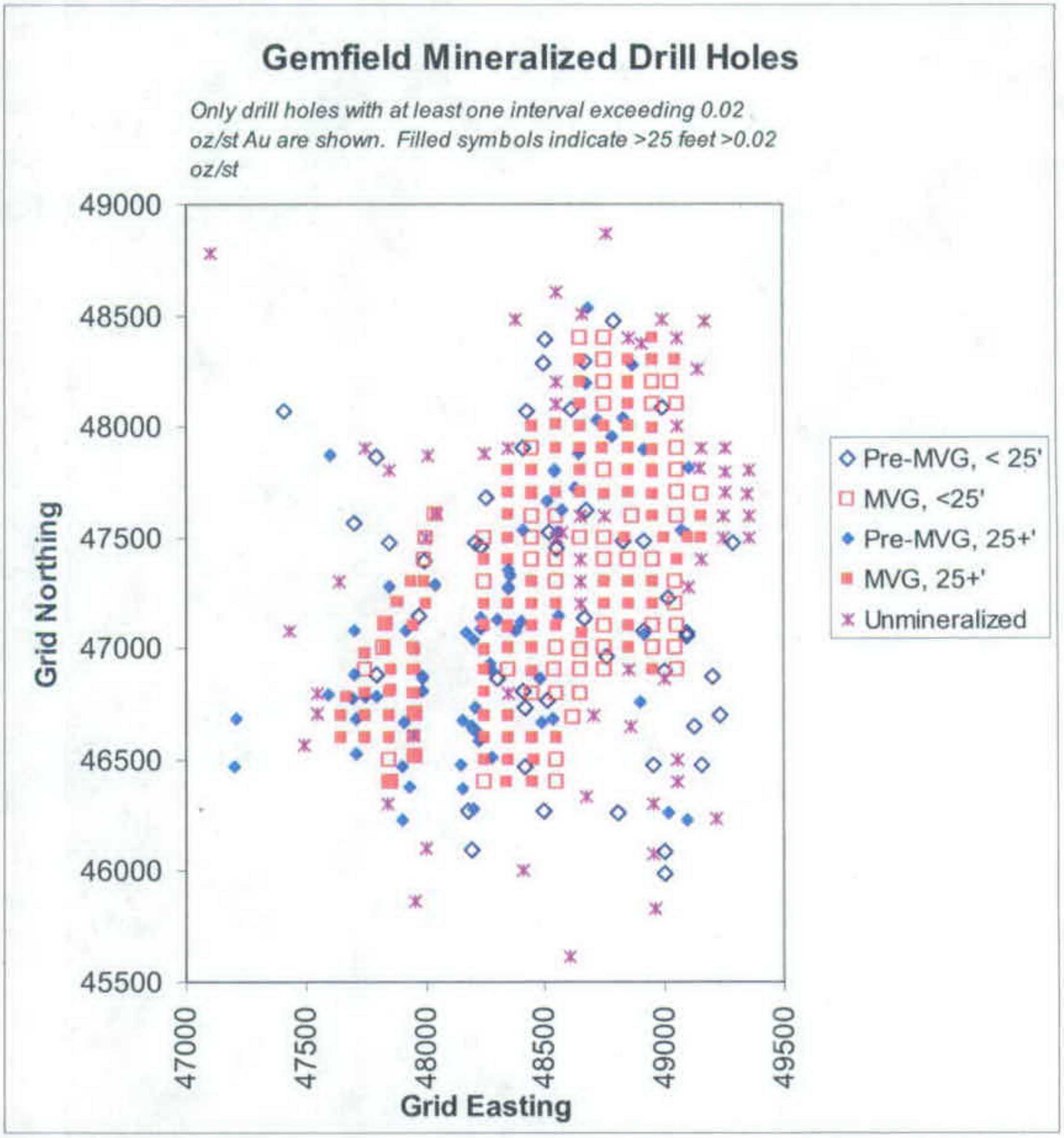
Table 13-1: Gemfield Drilling Campaigns

Period	Company	Assay Lab	Hole Prefixes	Number of Holes	Number of Mineralized Holes [1]	Meters of Au > 0.02 oz/st [2]
Jan 92 - Aug 95	Kennecott	Barringer	GEM, GFC, RK	162	117	1,796
Apr 98 - May 99	Franco NV	Chemex	GEM	11	3	124
TOTAL pre-MVG				173	120	1,921
MVG	MVG	Chemex, AAL	GEM	231	191	2,884

[1] Defined for this check as any drill hole containing one or more intervals with Au grade exceeding 0.02 oz/st.
[2] 0.02 oz/st Au = 0.69 g/t Au

The distribution of mineralized drill holes (as defined previously for this check of coverage only) in the Gemfield deposit for MVG and historic drill holes indicates that there are no large areas of the deposit that are not covered by MVG drilling (Figure 13-1).

Figure 13-1: Gemfield Drill Collar Locations of Au-Mineralized Holes Distinguishing Pre-MVG and MVG Campaigns



The plot subdivides the mineralized drill holes into those that have 7.62 m (25 ft), or more, of drilling with grades greater than 0.02 oz/st Au and those that have less.

Table 13-2 summarizes the drilling campaigns at McMahon Ridge. The MVG campaign contributes about 74% of the mineralized drill holes containing about 61% of the mineralized intervals. Figure 13-2 shows drill hole collar locations for the McMahon Ridge deposit. The MVG drilling campaigns show thorough coverage of the deposit.

Table 13-2: McMahon Ridge Drilling Campaigns

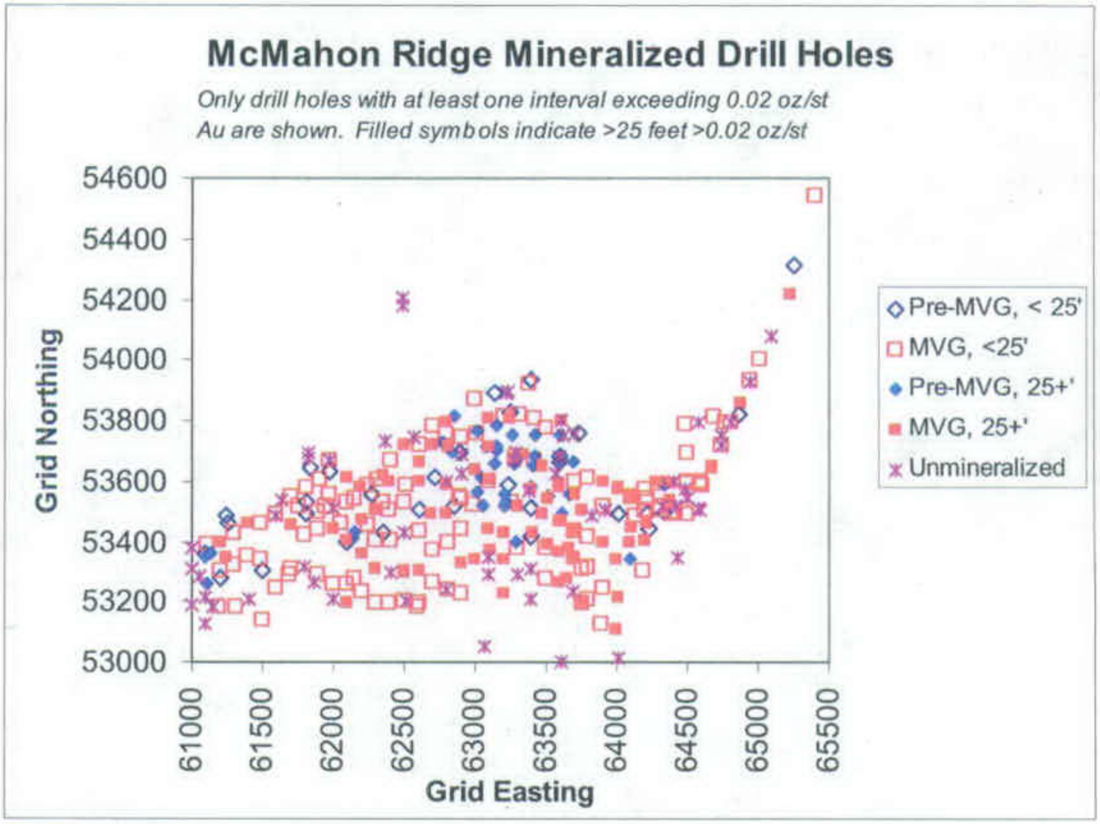
Time Frame	Company	Assay Lab	Hole Prefixes	Number of Holes	Number Mineralized Holes [1]	Meters of Au > 0.02 oz/st [2]
Jan-Apr 1975	Cordex	Rocky Mountain	D	16	8	105
Aug-Sep 1982	Meridian	Skyline	GB	10	4	15
Oct 89 - Jan 90	American Resources	GSI	M	8	6	52
Aug-Sep 1991	Crown (Resources?)	Unknown	GF91	8	6	38
Aug 92 - May 93	American Resources	Chemex	M	9	8	228
Jun 94 - Jun 95	Kennecott	Barringer	GMR	30	19	344
Jul 99 - Aug 00	Romarco	Chemex	GFMCM, GFCB	21	19	323
TOTAL pre-MVG				102	70	1,105
	MVG	Chemex, AAL	GFMCM	241	201	1,748

[1] Hole was flagged as mineralized if it had at least one sample with Au greater than 0.02 oz/st
[2] 0.02 oz/st Au = 0.69 g/t Au

The MVG quality control coverage consists of check assays of 10 mesh sample rejects of mineralized zones. The checks cover nearly all mineralized samples collected by MVG.

In the Gemfield deposit, MVG has check results for 2,206 samples covering approximately 10,991 feet (3,350 m) of drilling. All of the 190 MVG drill holes that have at least one drill sample with a grade greater than 0.02 oz/st Au, have check assay results. There are about 2,884 m (9,462 ft) of MVG drill sample intervals grading greater than 0.02 oz/st Au and over 85% of these have been checked.

Figure 13-2: McMahon Ridge Drill Collar Locations of Au-Mineralized Holes Distinguishing Pre-MVG and MVG Campaigns



Similarly, in the McMahon Ridge deposit, AMEC identified 1,894 sample intervals spread across 272 drill holes where the Au result exported to the model exceeds 0.02 oz/st. Of these, 986 have check assays, covering 191 of the 272 drill holes that have at least one interval with Au greater than 0.02 oz/st. Additional checks were performed on some intervals with grades of 0.02 oz/st Au or less. There were a total of 2,166 check assays covering 3,264 m (10,710 ft) of drilling spread across 234 drill holes. The checks are extensive for the holes drilled by MVG.

13.3.2 Pre-MVG Quality Control Data

Although the quality control documentation is not available for the pre-MVG campaigns, the laboratories used in these campaigns are known to have routinely practiced quality control on their fire assay batches, including at least one blank and two duplicate controls in each furnace-load of gold fire assays, as part of their internal quality control. The exception to this is the 1981 Crown Resources 8-hole drilling campaign at McMahon Ridge, where the identity of the laboratory is unknown.

Handwritten notations on photocopies of historic assay certificates show that Kennecott inserted some standard reference materials (probably materials made in-house) as a further check on laboratory accuracy. These included a standard named "H" as well as some others that were probably standards because they had elevated grades and did not correspond to any drill hole sample interval. However, AMEC was unable to obtain any reports or other information about these standards. Hence, QC is known to have been exercised on the samples assayed prior to MVG's work, but what that data revealed about assay precision and accuracy are not known. This situation is typical of Nevada mineral properties that have undergone several changes of ownership.

13.3.3 MVG Quality Control Data

MVG established a check assay program as its sole method of validating assay accuracy. No other quality controls were submitted by MVG, such as blind inserted standards, blanks, or duplicates. However, results of laboratory duplicates are routinely reported on laboratory assay certificates, and all laboratories are known to check their accuracy from time to time using certified standard reference materials as well as in-house materials. MVG has stored all the duplicate results obtained from the assay reports in its database.

The check assay program was guided by an MVG geologist with more than 30 years of exploration experience. The MVG geologist identified mineralized intercepts for re-assaying based upon initial assay results and/or intervals of hydrothermal alteration that returned only minor or no gold values. Stored coarse reject samples (nominal 10 mesh samples) for the identified drill intervals were submitted to a second assay laboratory for check analyses. In some instances the -10 mesh coarse reject sample bags selected for check analyses had deteriorated and therefore were not submitted for re-assay. Sample bags that are found to be compromised in anyway, either upon receipt from the lab or after the bags have been stored at the Merger site, are discarded. MVG reports that all sample pulp rejects are in good condition, stored securely in the steel cargo containers at the Merger storage site, and are available for additional check analyses MVG also has the pulp rejects from the Romarco drilling, much of the Kennecott drilling, and possibly from some of the ARC drilling.

The samples selected for check assay were usually submitted to one of two laboratories in Sparks, NV: either FAS or to BSI-Inspectorate. In a few cases AAL served as the check laboratory and one of these laboratories was the primary laboratory. Table 13-3 summarizes the laboratory usage in the check assay program. About ¾ of the checks were performed by FAS.

The check assay program employed the same analytical procedure as the original assaying: a 30 gram fire assay with an instrumental (ICP or AAS) finish, with re-assays of high-grade samples (typically grades greater than 10 g/t Au) using a gravimetric finish. In rare cases where the geologist judged the check results to show poor agreement with the original result, the sample was submitted to another laboratory for a third assay.

Table 13-3: Laboratories Used in the MVG Check Assay Program

Laboratory	Number of holes	Number of checks
AAL	10	358
BSI	81	804
FAS	364	3,307
Unknown	2	9
Total	**457**	**4,478**

AMEC divided the Gemfield MVG checked samples into two groups: GEM-165 to 307 and GEM-308 to 385. Samples with pair means less than 0.005 oz/st Au were discarded, as was the one sample pair averaging more than 30 oz/st Au. AMEC then calculated linear fits for each group using the method of Reduction to Major Axis. Unlike the popular "least squares fit", this method properly treats the two sets of results as independent variables. AMEC found no measurable bias between original and check assay results for GEM-165 to 307 group, and check results about 2.5% lower than the original results for the GEM-308 to 385 group (Table 9-4). AMEC regards relative biases shown in check assay programs of less than five percent to be very good agreement. The check assay results strongly support the accuracy of the original results.

XY scatter plots of the results with the data, the linear fit, and outliers excluded when calculating the linear fit, are shown in Figure 13-3.

The outliers were not clustered, except for a pair of spatially adjacent samples in GEM-269 that appear to be sample swaps, and a bad run of results between 370 and 540 feet (113 to 165 m) in GEM-311, and a smaller run in GEM-385C (Table 13-5)

Table 13-4: Linear Fit Statistics for MVG Check Assay Results

Gemfield Check Assay Results	All Data	Excluding Outliers (1)	Excluding Outliers (2)
MVG Drill Holes GEM-165 to GEM-307			
Number	1107	1097	1087
Percent Rejected	0.0%	0.9%	1.8%
R Squared	0.961	0.990	0.990
Slope M	0.986	1.004	1.004
Error in Slope	0.006	0.003	0.003
Intercept B	0.002	0.001	0.001
Error in Intercept	0.002	0.002	0.002
MVG Drill Holes GEM-308 to GEM-335			
Number	1080	1065	1050
Percent Rejected	0.0%	1.4%	2.8%
R Squared	0.974	0.979	0.983
Slope M	0.978	0.977	0.975
Error in Slope	0.005	0.004	0.004
Intercept B	0.001	0.001	0.001
Error in Intercept	0.001	0.001	0.001

Figure 13-3: Gemfield Check Assay Results (left: full scale, right: shows detail near origin)

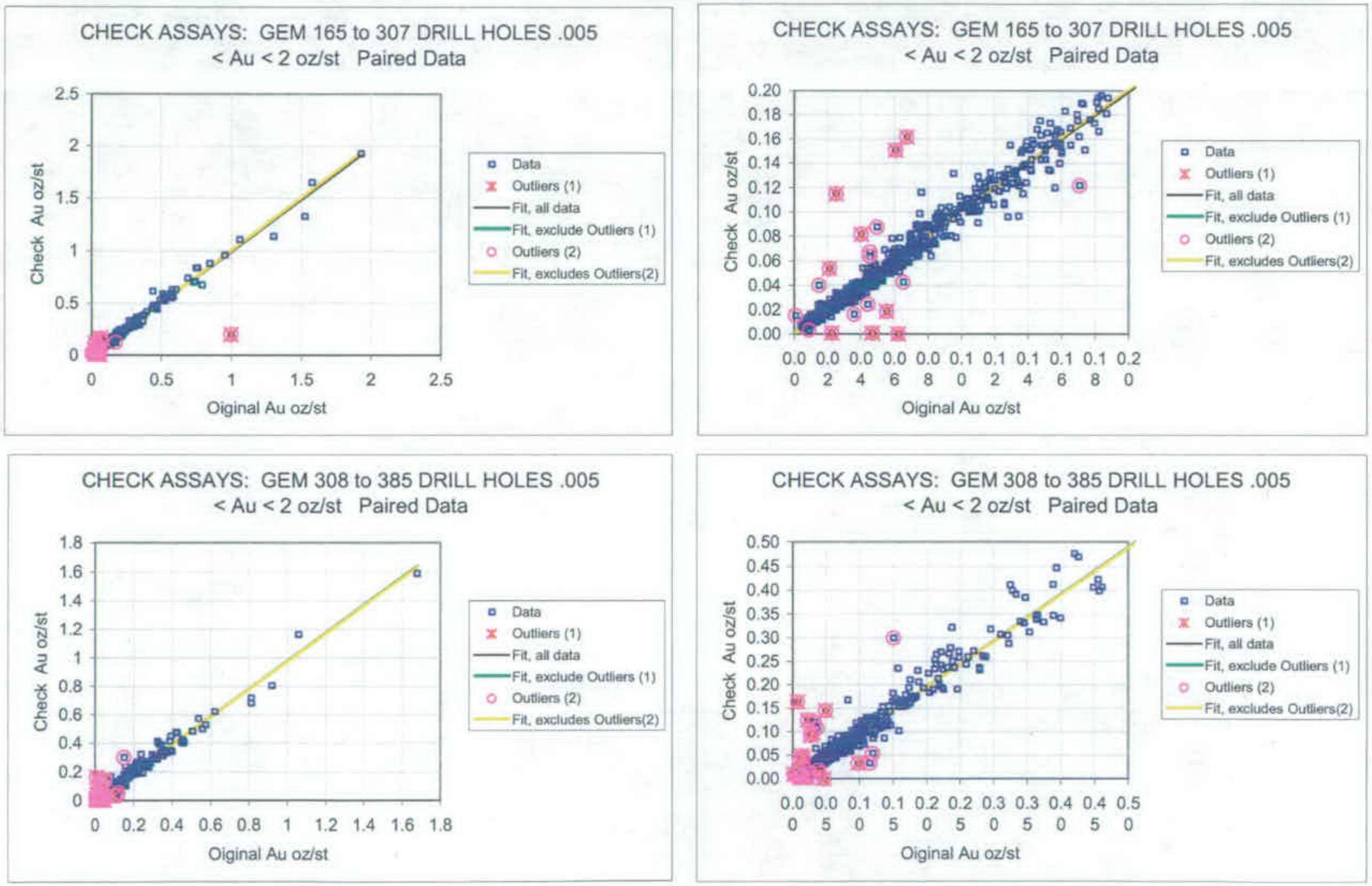


Table 13-5: AMEC-Identified Outliers in Gemfield Check Assay Pairs

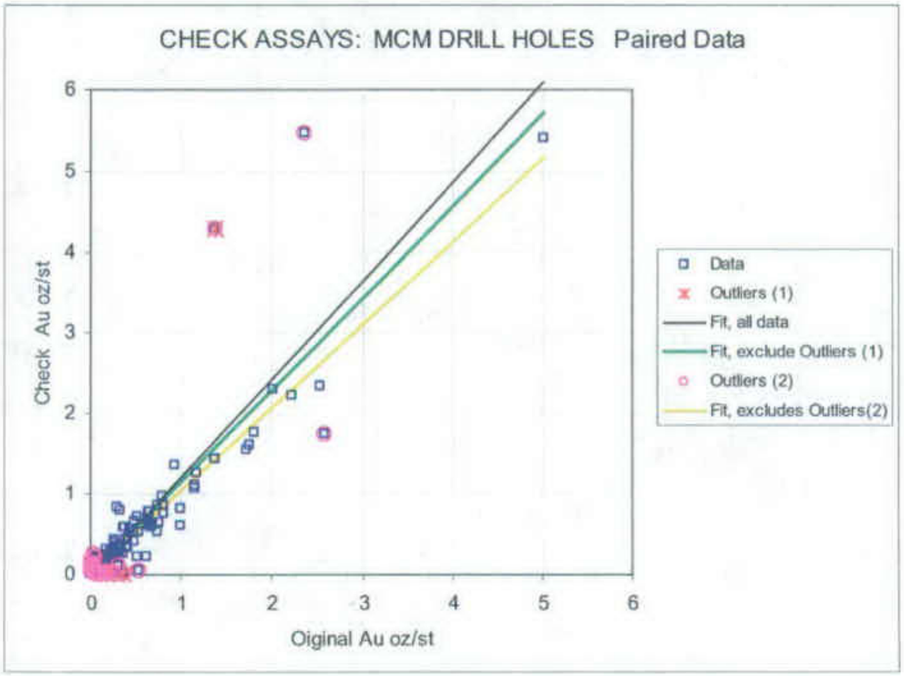
Drill Hole Depth (ft) GEM-165 to 307	Original Au oz/st	Check Au oz/st	Drill Hole Depth (ft) GEM-308 to 385	Original Au oz/st	Check Au oz/st
GEM-169.212.5	0.045	0.064	GEM-311.370	0.115	0.034
GEM-170.160	0.062	0.000	GEM-311.375	0.023	0.004
GEM-192.177.5	0.025	0.115	GEM-311.420	0.014	0.049
GEM-205.85	0.045	0.067	GEM-311.425	0.040	0.013
GEM-208.70	0.009	0.003	GEM-311.470	0.037	0.108
GEM-236.130	0.061	0.151	GEM-311.480	0.010	0.037
GEM-238.105	0.171	0.122	GEM-311.530	0.027	0.092
GEM-245.145	0.036	0.016	GEM-311.535	0.098	0.034
GEM-247.105	0.047	0.001	GEM-311.540	0.033	0.121
GEM-251.100	0.044	0.025	GEM-336.510	0.023	0.125
GEM-254.90	0.067	0.162	GEM-340.430	0.119	0.054
GEM-266.75	0.001	0.015	GEM-340.440	0.049	0.145
GEM-268.120	0.065	0.043	GEM-342.370	0.005	0.013
GEM-268.50	0.995	0.196	GEM-344.395	0.030	0.098
GEM-269.160	0.021	0.054	GEM-344.400	0.016	0.044
GEM-269.165	0.055	0.019	GEM-346.385	0.002	0.011
GEM-274.35	0.022	0.001	GEM-360.75	0.013	0.007
GEM-275.90	0.040	0.082	GEM-361.65	0.008	0.164
GEM-296.130	0.049	0.088	GEM-362.85	0.003	0.009
GEM-307.665	0.015	0.040	GEM-376.140	0.151	0.299
			GEM-376.30	0.047	0.001
			GEM-380C.190	0.026	0.014
			GEM-380C.220	0.038	0.018
			GEM-382C.120	0.012	0.006
			GEM-383C.315	0.023	0.010
			GEM-383C.425	0.015	0.007
			GEM-385C.240	0.014	0.004
			GEM-385C.245	0.007	0.004
			GEM-385C.254.6	0.011	0.003
			GEM-385C.325	0.022	0.005

Using the same procedure, AMEC calculated the linear fit for the McMahon Ridge check assay results. Results are shown in Table 13-6 and Figure 13-4. The check results are about three percent higher than the original assay results. Hence the checks results strongly support the accuracy of the original results. Outliers are listed in Table 13-7. These show some probable mix-ups.

Table 13-6: Check Assay Results for McMahon Ridge

McMahon Ridge Check Assays:	**0.005 < Au oz/st**		
	All Data	**Excluding Outliers (1)**	**Excluding Outliers (2)**
N	1806	1799	1769
Percent Rejected	0.0%	0.4%	2.0%
R Squared	0.834	0.881	0.970
Slope M	1.219	1.141	1.034
Error in Slope	0.012	0.009	0.004
Intercept B	-0.011	-0.007	-0.001
Error in Intercept	0.005	0.005	0.004

Figure 13-4: McMahon Ridge Check Assay Results



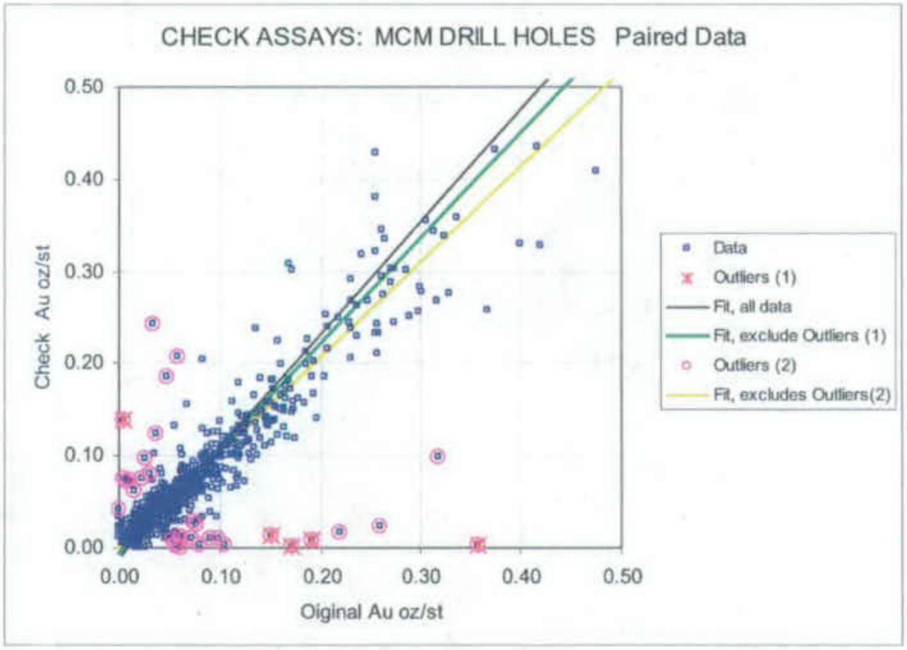


Table 13-7: AMEC-Identified Outliers in McMahon Ridge Check Assay Pairs

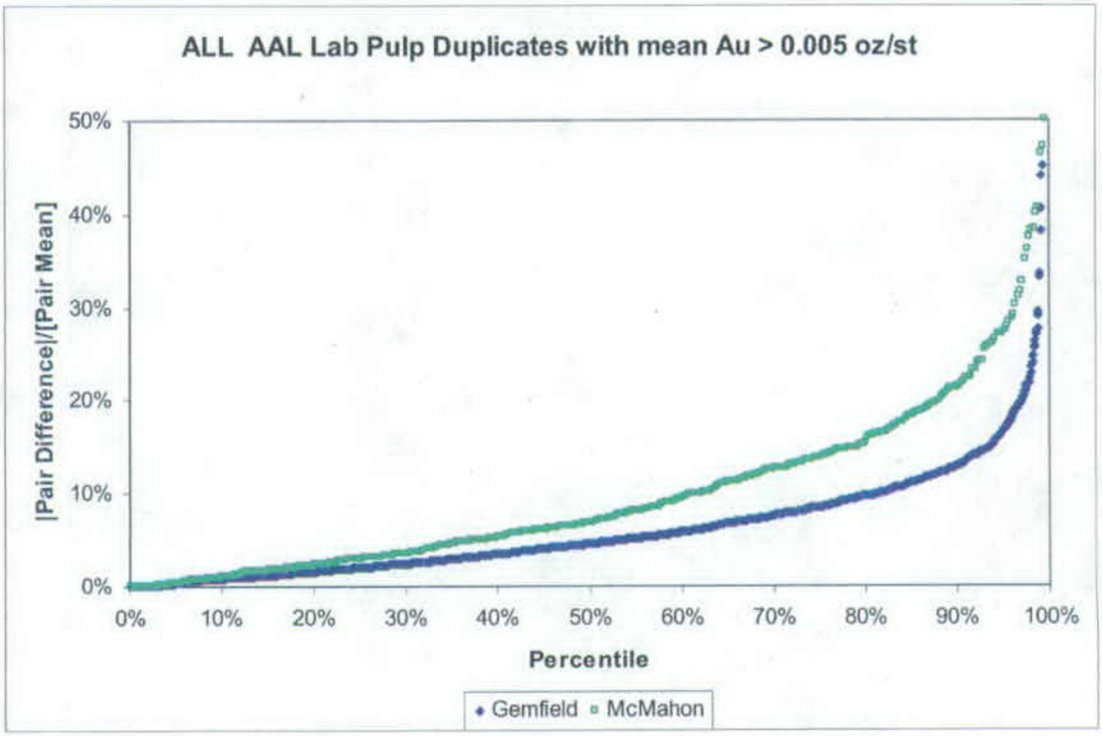
Drill Hole Depth (ft)	Original Au oz/st	Check Au oz/st	Drill Hole Depth (ft)	Original Au oz/st	Check Au oz/st
GFMCM-154.565	0.062	0.011	GFMCM-261.140	0.172	0.002
GFMCM-154.620	0.011	0.073	GFMCM-261.145	0.004	0.139
GFMCM-164.345	2.582	1.725	GFMCM-262.415	0.048	0.185
GFMCM-176.150	2.358	5.454	GFMCM-262.420	0.038	0.124
GFMCM-176.155	1.378	4.280	GFMCM-282.300	0.062	0.009
GFMCM-176.395	0.016	0.062	GFMCM-287.605	0.026	0.097
GFMCM-180.160	0.106	0.003	GFMCM-289.5	0.055	0.008
GFMCM-180.180	0.024	0.075	GFMCM-298.10	0.191	0.008
GFMCM-186.250	0.057	0.003	GFMCM-308.5	0.151	0.014
GFMCM-190.95	0.004	0.076	GFMCM-314.600	0.034	0.242
GFMCM-192.120	0.061	0.001	GFMCM-333.90	0.057	0.001
GFMCM-192.200	0.219	0.017	GFMCM-341.20	0.526	0.047
GFMCM-199.30	0.098	0.010	GFMCM-343.370	0.058	0.208
GFMCM-217.30	0.075	0.029	GFMCM-343.5	0.008	0.072
GFMCM-217.35	0.031	0.080	GFMCM-348.405	0.080	0.004
GFMCM-225.100	0.000	0.041	GFMCM-348.525	0.091	0.010
GFMCM-225.5	0.318	0.099	GFMCM-348.545	0.359	0.003
GFMCM-252.110	0.260	0.023	GFMCM-348.555	0.072	0.010
GFMCM-257.450	0.077	0.026			

13.3.4 Precision Demonstrated by AAL Duplicates

AAL reports approximately five percent of its results in duplicate and a very small percentage of these receive a third assay. These data were retained in the MVG database. AMEC selected the AAL duplicate pairs that had pair means exceeding 0.005 oz/st Au for samples from the Gemfield and McMahon Ridge deposits.

For each selected pair, AMEC calculated the absolute value of the pair difference divided by the pair mean. These were then sorted in ascending order for the sample pairs from Gemfield (N=1,319), and for the pairs from McMahon Ridge (N=411), and the pairs plotted against their percentile; for example, the highest relative difference is assigned a percentile rank of 100 percent and the pairs with the lowest relative difference (typically zero) are assigned ranks of zero (or near zero in the case of ties). This chart is sometimes referred to as an ARD or AVRD (Absolute Value of Relative Difference) chart. It provides a comparison of precision for when groups may have a different number of pairs. The AVRD chart is shown in Figure 13-5.

Figure 13-5: AVRD Chart Comparing AAL Duplicates from Gemfield and McMahon Ridge

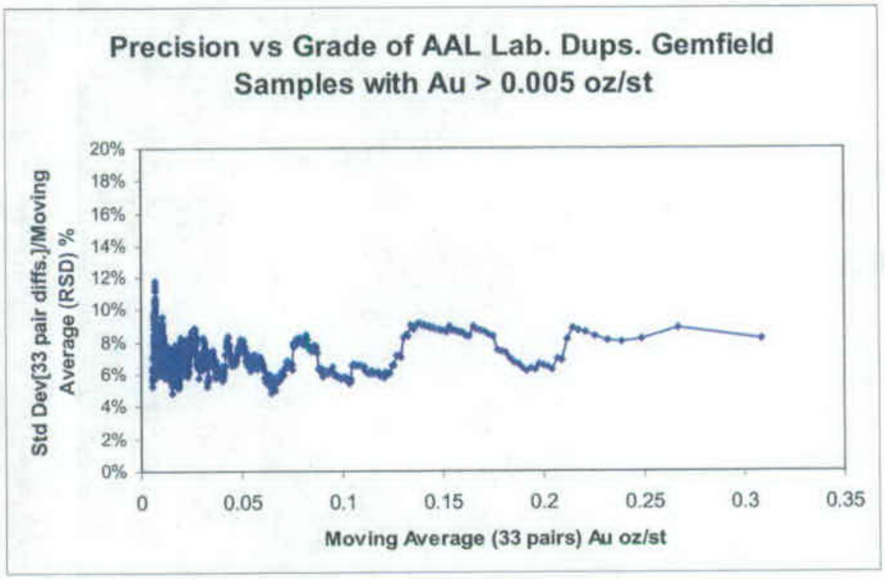


The chart shows that the Gemfield duplicates have superior precision to the McMahon Ridge duplicates. Assuming there are no differences in the quality of the laboratory preparation and analysis between the two groups, this indicates that McMahon Ridge likely has a slightly larger gold particle size in the sample pulps, compared to Gemfield.

For base metal or Carlin-type gold deposits, AMEC considers that same-pulp duplicates run in the same match show good precision if 90 percent of the pairs agree within ±10 percent. The Gemfield pairs approach this. The McMahon Ridge duplicates show worse precision, but better precision than is commonly obtained from deposits that have some visible (>100 micron) gold. AMEC concludes the precision shown by these duplicates is acceptable for resource modeling a deposit of this type.

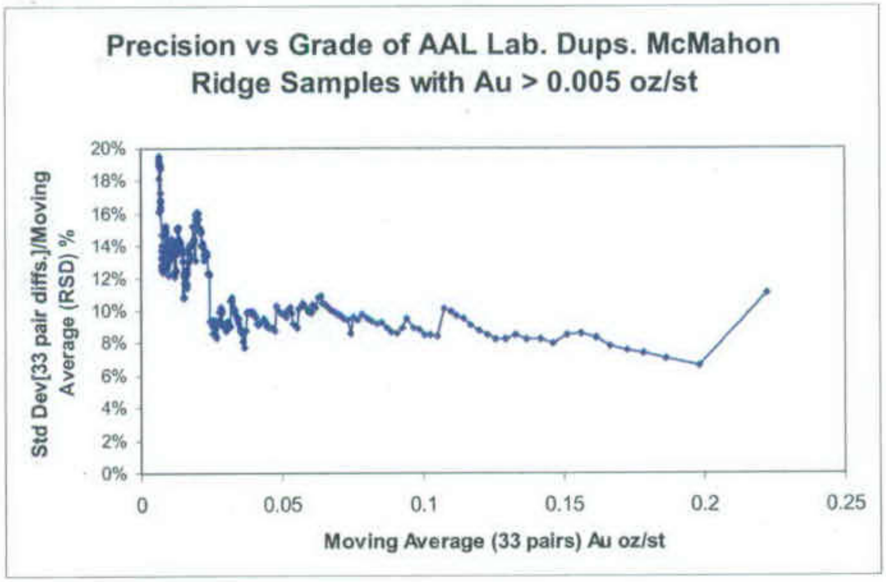
Precision, expressed as a relative difference, usually improves with increasing grade. This can be evaluated using pair duplicates. After discarding outliers, AMEC sorted the pairs in ascending order and calculated the standard deviation of pair differences for a moving window of 33 duplicate pairs. These pairs were divided by the average grade of the same moving average to obtain a relative standard deviation of pair differences, and plotted against the moving average grade (Figure 13-6).

Figure 13-6: Precision Versus Au Grade of AAL Same-batch Pulp Duplicates for Gemfield



The precision shown by Gemfield and McMahon Ridge is quite similar, with somewhat poorer precision evident in the McMahon samples at the lower end of the grade range, below about 0.03 oz/st Au (Figure 13-7). Precision does not improve with increasing grade but it does not appreciably worsen either. AMEC considers the precision acceptable for resource modeling at all grade ranges.

Figure 13-7: Precision Versus Au Grade of AAL Same-batch Pulp Duplicates for McMahon Ridge



14.0 DATA VERIFICATION

14.1 Previous Data Verification

Drill collars on the Property were observed by John Sullivan and Mohan Srivastava of WGM during site visits in 2004 and 2005 respectively; in addition RC rock chips, drill core, historic workings "ore"/waste heaps and outcrops were examined. Five independent representative samples were taken by WGM during the initial visit. Two were from outcrop, one from a historic "ore"/waste heap, one from drill core and the fifth from RC rock chips. All were taken to confirm the presence of gold. The samples were placed in plastic and/or cloth sample bags along with numbered sample tags and returned to Canada where they were analyzed by ALS Chemex at their ISO 9002 certified laboratory in Vancouver. They were in the care of WGM until being shipped to ALS Chemex. Gold was determined by fire assay with an AA finish on a 30g sample. In addition, 34-element ICP analysis (ALS Chemex's ME–ICP41 package) was carried out on each sample following an aqua regia digestion. The WGM sampling results are documented in Table 14-1. The presence of gold was confirmed in all five samples. The samples from the Thanksgiving Gift Vein and Spearhead Dump were also anomalous in Ag, As, Cu and Sb. Correlation between WGM and MVG assays (this was possible for two samples) was not particularly good but no conclusions can be drawn from such a small sample population.

Table 14-1: WGM Goldfield Site Visit Sampling Results

Sample Number	Hole Number or Location	From (m)	To ((m)	Au (g/t)	Ag (g/t)	Cu (ppm)	As (ppm)	Sb (ppm)
2313	Thanksgiving Gift Vein			15.55	499	3,020	331	1,740
2314	Great Bend			6.39	19	92	21	24
2315	Spearhead Dump			1.75	35	4,850	1,695	3,430
2316	McMahon Ridge 135C – core	57.1	59.2	3.64	34	71	21	51
	MVG Assay			2.01				
2317	Gemfield 268 – RC chips	10.7	22.9	3.22	17	106	40	59
	MVG Assay			14.38				

During his site visit, Mohan Srivastava compared the MVG electronic data base information for ten complete drill holes, five from each of McMahon Ridge and Gemfield, against copies of the original assay certificates. The only discrepancies noted were for intervals where duplicate assays had been averaged to create the assay value recorded in the data base. Downhole survey information was also checked and minor errors in the electronic version were corrected. The ability to trace the electronic data back to its original source and, when necessary, to correct errors is a testament to the excellent records and files maintained by MVG at the Goldfield site.

14.2 AMEC Data Verification

From June 26 to 30, 2006, AMEC checked assay certificates in MVG's offices in Reno, Nevada against a copy of its ACCESS database, and performed other cross-checks. The database that was checked contained drilling to end-2005.

14.2.1 Verification of Assay Data

AMEC organized the assay data into campaigns and randomly selected approximately five percent of the drill holes from each campaign. Assay certificates were organized by drill hole in MVG's files. The certificates were either photocopies of original assay certificates or the original assay certificates. Most assays were reported in units of ppb or ppm (g/t) Au. AMEC found that some of the gold results were originally reported on assay certificates in units of ppm or ppb, converted to oz/st in the MVG database with rounding of the calculated result. In order to check the database against the source data, it was necessary to convert the database results back into units matching the assay certificate. Because of the rounding, there would seldom be an exact match between the database and the assay result. Thus the check had to include an evaluation to determine if there was a reasonable agreement, considering the effect of the rounding. Where more than one result was reported for a sample (as part of the laboratory's quality control, AMEC calculated the average to confirm agreement with the average result stored in the database.

A total of 46 drill holes were selected for checking, of which 24 were located in Gemfield and the remainder in McMahon Ridge. Assay certificates for four of the drill holes selected for verification were not available at the time of AMEC's visit to the Reno office. The holes in question are located on McMahon Ridge: GF91-5 (Crown), GFMCM-058 (Romarco), GFMCMR-1 (North), and USGS-2. The USGS drill hole results are known to be published in a USGS report, but a copy of the publication was not available at the time of AMEC's visit. This hole reportedly is not mineralized. MVG reports that the USGS report and the assay certificates for the Romarco and North drill holes are stored in MVG's office in Goldfield. The assays for GF91-5 are reported in a table reported by Crown Resources without a supporting laboratory certificate.

AMEC checked approximately 3,115 sample intervals from the 42 drill holes that had assay records available. Of these, there appeared to be only one entry error, where a result of 4 ppb Au was entered instead of 5 ppb Au. In addition, there were complications involving rounding errors, particularly for the Kennecott data. The typical sample would differ by up to 7 ppb Au from the entry in the database, because the data on the assay certificates, reported in ppb Au, were converted at some point into oz/st Au, and rounded to four places after the decimal. The database field containing the Au in ppb figure was re-calculated from that rounded value. AMEC went through the entire procedure to determine if the difference could be accounted for by rounding. AMEC found nine cases where the rounding was not as predicted; however the largest difference amounted to 16 ppb Au; hence, this pattern of rounding errors appears to present negligible risk to the assay quality. MVG is in the process of correcting this error in the legacy data. These small rounding errors present zero risk to resource estimation.

The assay data in the ACCESS® database show a good match with the source documentation and should be considered acceptable for resource modeling efforts.

14.2.2 Comparison of Topography to Collar Elevations

At AMEC's request, MVG produced a plot of drill collar locations with elevations from the drill collar survey posted onto a topographic survey map generated from air photos. AMEC then compared some of the collar location elevations from the elevation that could be inferred from the collar survey. Both map and collar elevations were in imperial units (ft). The contour interval was 1.52 m or 5 ft.

Neither McMahon Ridge nor Gemfield showed a pattern of elevation differences that that indicated hole locations were shifted horizontally relative to the topographic coverage.

AMEC measured the differences between collar elevations and topography from the topographic coverage for 32 drill holes in McMahon Ridge. The differences ranged from -5 to +7 ft (-1.52 to 2.13 m) with a median difference of 2.5 ft (0.76 m). The largest identified difference, of 7 ft, was checked on an aerial photo and the collar found to be located on a large historic mining dump that was not reflected in the topographic coverage. The topographic coverage and accuracy of drill hole collar surveys appear sufficiently accurate for use in resource estimates. The precision of the topographic coverage is about ±2.5 ft.

AMEC concurs with MVG's view that the slight errors noted between topographic contours and drill hole collar surveys are unavoidable using the current precision of topographic coverage in the Goldfield district (10' contours flown by IntraSearch for Romarco Minerals on Oct. 31, 1998--approximately 1:24,000 scale coverage).

14.2.3 Core–RC Twin Drill Holes

MVG has twinned some RC drill holes with diamond (core) drill holes. In their report, WGM noted that, over the entire mineralized zone, the RC and diamond drill hole assays are on average, within 2% of each other for Gemfield, and within 4% of each other for McMahon Ridge. The Core–RC twins are listed in Table 14-2.

AMEC found that the core holes were not always the same length as the RC drill holes, but were drilled deep enough to intercept the mineralized intervals cut by their RC twins. There were also a very few instances where there was no result for a sample interval of core due to poor recovery, but these instances are limited. AMEC selected the depth intervals that had results for both core and RC in each pair of drill holes, and calculated the length-weighted average grade of the drill holes.

AMEC also found that the drill holes with the higher average gold grades showed larger disparities between RC and core results. These were in some cases the consequence of one, or a few, very high-grade intervals. To show the effect of the high-grade intervals, AMEC recalculated the average grades of the core and RC drill holes after applying different grade caps (100 g/t Au, 20 g/t Au, and 10 g/t Au). Results are plotted in Figure 14-1 and global averages compared in Table 14-3. The global averages compared in Table 14-3 are simple averages (drill holes are weighted by their length).

Results show that the RC drill holes are usually higher by about ten percent. The reason for the difference is not known and the difference should be considered as adding risk to the resource estimation process. It may be a consequence of either selective gold loss from core drilling, or gold enrichment in RC cuttings, or a combination of these effects. Selecting high-grade RC holes to twin with core may exaggerate the effect if mineralization occurs in lenses that have extents that are less than or similar to the twin separation distance.

MVG reports that these differences have been reviewed, and that most of the gold assay discrepancies correspond to geological differences encountered in each drill hole. The PQ size core holes drilled for MVG in 2003 are very straight compared to the twinned RC holes which show drift at depth. Thus the hole separation distance increases between twin drill intervals with increasing hole advance. As drill hole separation increases, geological variations are more likely to occur especially in the case of mineralized zones in bonanza gold systems like Goldfield.

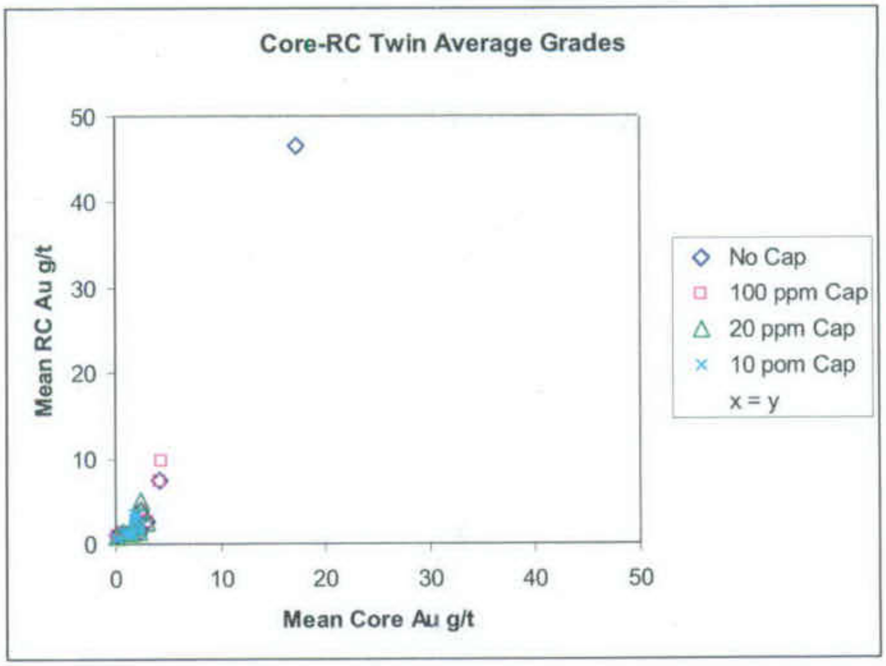
Table 14-2: Core–RC Twin Hole Locations and Collar Separation Distance in Feet

Area	Core Hole ID	X ft	Y ft	Type	RC Hole ID	X ft	Y ft	Distance ft
Gem.	GEM-380C	48448.6	47695.1	Core LS-244 PQ	GEM-170	48451.1	47700.3	5.8
Gem.	GEM-381C	48949.2	47794.8	Core LS-244 PQ	GEM-268	48949.9	47799.4	4.7
Gem.	GEM-383C	47854.9	46810.3	Core LS-244 PQ	GEM-310	47846.4	46802.6	11.5
Gem.	GEM-384C	48854.5	48192.6	Core LS-244 PQ	GEM-256	48850.0	48199.5	8.2
Gem.	GEM-385C	47952.7	46906.8	Core LS-244 PQ	GEM-183	47952.7	46901.1	5.7
McM.	GFMCM-110C	63099.6	53597.3	Core LF-70 HQ	GFMCM-144	63092.7	53604.1	9.7
McM.	GFMCM-135C	63508.7	53539.0	Core LS-244 HQ	GFMCM-092	63514.0	53548.7	11.1
McM.	GFMCM-321C	63281.3	53680.5	Core-PQ	GFMCM-107	63273.0	53672.6	11.5
McM.	GFMCM-322C	63608.8	53464.0	Core-PQ	GFMCM-164	63594.1	53464.2	14.7
McM.	GFMCM-323C	63597.9	53582.4	Core-PQ	GFMCM-098	63597.2	53589.4	7.0
McM.	GFMCM-324C	63396.5	53574.1	Core-PQ	GFMCM-080	63385.7	53579.7	12.2

To illustrate this point, MVG cites the example of RC hole GFMCM-164 that intersects a high grade ledge zone in the interval from 103 m to 110 m (340-360 ft). This ledge material is not present at a similar depth in the twin core hole GFMCM-322C. MVG believes that the lower ledge zone was simply missed by the core twin due to the strike and dip of the ledge. Hence, the observed difference in gold grades between the two holes is not believed to have been caused by downhole contamination. The same circumstance is noted in twin holes GEM-179 and GEM-382C, at an interval depth of 55 m to 75 m (180-245 ft). As was noted in the previous example, the gold grade of the interval in the RC hole GEM-179 is notably higher than that obtained in the twin core hole GEM-382C for the same reason as noted in the first example.

MVG also believes that the two drilling methods often produce varying results for certain geological materials such as silicified ledge and intensely altered clay zones. For example, variable gold assay results are noted in core holes GFMCM-110C, GFMCM-123C, GFMCM-135C, and their respective RC twins. MVG reports that the HQ core holes on McMahon Ridge do not sample ledge material well because gold particles in clay seams are washed out of the recovered core during the slow, wet core drilling process.

Figure 14-1: Comparison of Average Gold Grades of Core-RC Twins (at 2 scales)



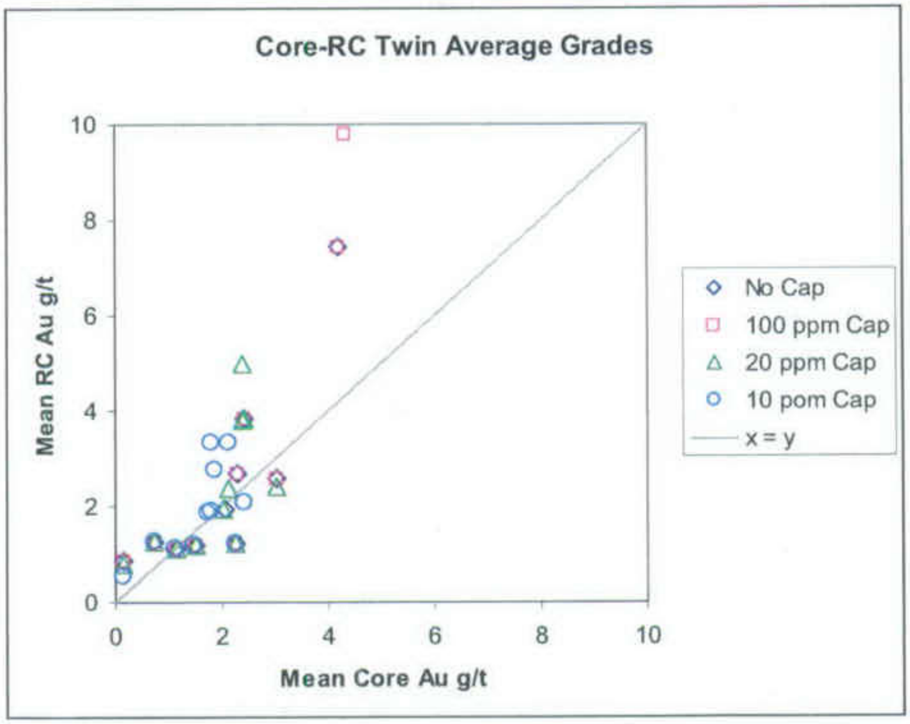


Table 14-3: Comparison of Twin Hole Average Gold Grades

Core Drill Hole	Length	Au g/t with Cap =				RC Drill Hole	Length	Au g/t with Cap =				Core/RC for Au g/t Cap =			
	m	none	100	20	10		m	none	100	20	10	none	100	20	10
GEM-380C	52.1	1.2	1.2	1.2	1.1	GEM-170	51.8	1.1	1.1	1.1	1.1	1.06	1.06	1.06	1.04
GEM-381C	57.0	17.2	4.3	2.4	1.8	GEM-268	54.9	46.4	9.8	5.0	3.3	0.37	0.44	0.48	0.55
GEM-383C	84.2	2.3	2.3	2.1	1.8	GEM-310	82.3	2.7	2.7	2.3	1.9	0.86	0.86	0.91	0.96
GEM-384C	43.0	3.0	3.0	3.0	2.4	GEM-256	41.1	2.6	2.6	2.4	2.1	1.17	1.17	1.25	1.18
GEM-385C	75.7	2.4	2.4	2.4	2.1	GEM-183	73.2	3.8	3.8	3.8	3.3	0.63	0.63	0.63	0.64
GFMCM-110C	95.1	0.2	0.2	0.2	0.2	GFMCM-144	89.9	0.9	0.9	0.8	0.5	0.19	0.19	0.21	0.31
GFMCM-135C	56.3	0.7	0.7	0.7	0.7	GFMCM-092	53.3	1.3	1.3	1.3	1.3	0.58	0.58	0.58	0.58
GFMCM-321C	6.3	2.3	2.3	2.3	2.3	GFMCM-107	6.1	1.2	1.2	1.2	1.2	1.85	1.85	1.85	1.85
GFMCM-322C	58.7	4.2	4.2	2.4	1.9	GFMCM-164	56.4	7.4	7.4	3.8	2.7	0.56	0.56	0.63	0.68
GFMCM-323C	48.1	1.5	1.5	1.5	1.5	GFMCM-098	47.2	1.2	1.2	1.2	1.2	1.28	1.28	1.28	1.27
GFMCM-324C	53.7	2.1	2.1	2.0	1.7	GFMCM-080	51.8	1.9	1.9	1.9	1.9	1.08	1.08	1.05	0.93
Mean		3.4	2.2	1.8	1.6			6.4	3.1	2.3	1.9	0.87	0.88	0.90	0.91
Median		2.3	2.3	2.1	1.8			1.9	1.9	1.9	1.9	0.86	0.86	0.91	0.93

Conversely, core recovery in intensely altered clay zones almost always approaches 100%, whereas RC sample weights in clay-altered rock are often found to be low. In these examples, the gold values for ledge material are generally higher in the RC ledge samples than those in the core twin, but gold values in clay zones are higher in core samples than those from their RC twins. MVG believes that the differences noted in gold assays between the twinned holes for certain geological materials is often due to the inherent efficiencies and deficiencies of the respective drilling methods, and not always the result of downhole contamination.

14.3 Recommendations

AMEC recommends:

- that Metallic Ventures consider the use of blind inserted standards, blanks, or duplicates in future drilling programs
- that MVG should take care not to use zero in its database to indicate 'no assay', as occurs in some fields such as the check assay fields of its database, as this could be mistaken for a below-detection result.

AMEC notes a difference between assay results from the twinned RC–Core comparison, whereby RC holes are on average returning assay values 10% higher than the Core holes, which adds risk to the resource estimation process.

MVG has mitigated risk caused by downhole contamination by identifying the lower portions of some drill holes where they noted the possibility of downhole contamination. Another mitigating factor is the possible dilution of ore intervals by downhole contamination, although this factor would require RC drilling recovery measurements to be better quantified. In AMEC's experience, a ten percent difference between RC and drill core holes is not unusual, and it cannot be assumed that the source of the apparent bias rests solely with either the RC or the core sampling.

15.0 ADJACENT PROPERTIES

There are no adjacent properties that are relevant to this report.

16.0 MINERAL PROCESSING AND METALLURGY

16.1 MVG Test Work

In 2004, MVG engaged KCA of Reno, Nevada, to perform a metallurgical testing program on unsplit, PQ-sized drill core samples from ten holes drilled on the Gemfield and McMahon Ridge deposits. The work was completed and documented in separate reports in October 2004. The results were then reviewed and interpreted by McClelland Laboratories Inc. of Reno in April 2005.

The objectives of the program were to assess the amenability of the deposits for development as heap leach operations and provide the necessary parameters to support preliminary project development studies. In addition to testing the metallurgical response to heap leaching with cyanide, preliminary acid base determinations, work indices, percolation rates, and rock densities were also determined.

With the exception of a few samples from McMahon Ridge, the work was carried out on high-grade material, which ranged from 0.06 opt to 0.26 opt Au, versus a proposed pit grade of approximately 0.03 to 0.04 opt Au.

16.1.1 Gemfield Results

Six separate composite samples from the Gemfield deposit were tested and characterized by their sulfide content, grade and rhyolite content. Both bottle roll and column tests were completed. From the results of column leach tests over a 90 day period, the following were indicated:

- Rhyolite material crushed to 5 cm (2 inches) showed the highest recoveries, at 93%, with limited increased recovery with crushing to finer sizes. These positive results for rhyolite suggest it may represent good run-of-mine leaching material.
- Recoveries for the ledge material were the lowest and averaged 69%.
- A mixture of the ledge and rhyolite had an average recovery of 76%.
- By comparison of these laboratory results with the heap leach history of commercial operations, KCA projected cyanide consumption in the 0.7 pounds per short ton (0.35 kg/t) range for material crushed to 2 inches, and 1.3 pounds per short ton (0.65 kg/t) for material crushed to ¾ inch (19 mm).

- Hydrated lime consumption was projected to be approximately 2 pounds per short ton (1 kg/t).
- There was no evidence of carbonaceous material that could contribute to gold losses by absorption from the percolating leach solution.

16.1.2 McMahon Ridge Results

Four individual samples of the McMahon Ridge deposit were tested and characterized as to whether they were ledge or andesite types and for sulfide content. The samples were subjected to both column leach tests and bottle roll tests.

The test work results relative to a heap leach operation indicated the following:

- The moderate sulfide andesite samples showed recoveries in the range of 58 to 63% for ¾ inch material over a 90 to 120 day leach period.
- The ledge samples showed a lower recovery of 44% for the same leach time duration with a 2 inch crush size.
- The low sulfide samples of andesite showed better recoveries at 86% after 61 days when crushed to ¾ inch.
- The leach kinetics and ultimate recovery were reduced for the samples with higher sulfide content.
- There was some indication that recoveries would increase as the crush size was reduced.

16.2 Preliminary Ultimate Recovery Projections

Based on the sample descriptions provided by KCA in their reports, preliminary ultimate recovery projections were developed for the different Gemfield and McMahon Ridge deposit rock types.

The Gemfield and McMahon Ridge column leach tests performed at KCA, had durations ranging from 60 to 120 days. The proposed plan of operations for the heap leach is to irrigate material placed on the heaps for a minimum of four years to achieve ultimate recovery. Accordingly, the leach test work recovery profiles were extrapolated out to 365 days to determine ultimate recovery values, and a time-to-recovery factor (or time-scale-up factor) of 4 was applied to the data.

After initial first order leaching occurs at the start of operations, long-term heap leaching generally transitions into a second-order leaching equation of the form:

$$\textbf{Au or Ag Recovery (\%)} = [A \times \ln(\text{days})] + B$$

where A and B are constants specific to each ore type.

The test work data for all individual tests were fitted using linear regression to this form of equation and extrapolated to 365 days of leaching to predict the ultimate recovery. In order to account for operational inefficiencies (such as wetting inefficiencies, unleached side slope material, unleached material under access roads, solution inventory) the ultimate recoveries were discounted by 5%. Multiple tests for a given material were averaged to provide a single recovery projection.

The following tables (Table 16-1 for Gemfield, and Table 16-2 for McMahon Ridge) show the projected recoveries for the rock types identified in the KCA report for three potential recovery plant configurations:

- Crushing to 2", followed by heap leaching and carbon-in-column gold and silver recovery
- Crushing to ¾", followed by heap leaching and carbon-in-column gold and silver recovery
- Crushing and grinding to 200 mesh, followed by 48 hour carbon-in-leach gold and silver recovery.

There was only one 2" column test conducted on the McMahon Ridge materials. The difference between the 2" and the ¾" tests for this material was used to calculate an estimated recovery for the remaining materials at a 2" crush.

Table 16-1: Gemfield Recovery Projections

KCA Rock Type	2 inch heap leach (%)	¾ inch heap leach (%)	Milling (%)
Rhyolite			
Au	94.0	90.1	98.0
Ag	4.2	4.7	54.0
Ledge/Rhyolite			
Au	75.6	75.7	90.0
Ag	4.2	7.0	81.0
Ledge			
Au	70.3	69.3	90.0
Ag	7.9	4.2	62.5

Table 16-2: McMahon Ridge Recovery Projections

KCA Rock Type	2 inch heap leach (%)	¾ inch heap leach (%)	Milling (%)
Ledge			
Au	62.4	64.2	90.0
Ag	12.0	15.7	91.0
Ledge/Andesite			
Au	69.9	71.7	88.6
Ag	16.6	20.3	91.0
Andesite			
Au	65.3	77.1	71.0
Ag	35.0	38.7	76.0

16.3 Metallurgical Model for the Gemfield Deposit

16.3.1 Gemfield Sample Composite Analysis

The geological logging and sample data were used to create the Gemfield deposit metallurgical composites for KCA. There were no sulfide (unoxidized) composites tested. All of the composites tested would be considered as mixed oxide (partially oxidized). There were 347 core intervals provided from Gemfield to KCA for testing. Cyanide soluble assays were done for each of the original samples. These samples were combined to form 6 large composites that were used for 2" and ¾" column tests and -200 mesh bottle roll tests. There were an additional 47 composites made that were used for -28 mesh bottle roll tests.

In addition there were 734 cyanide soluble assays done on RC pulps. This yields a total of 1,081 cyanide soluble assays done by KCA of the 3,678 cyanide soluble assays available in the database. Approximately 30% of the assays used in the statistical analysis were from KCA.

Of the original 347 core intervals, 49 were logged as oxide, 14 as sulfide and the remainder as mixed oxide. Of these, only 18 of the oxide samples and only four of the sulfide samples were used in the compositing. Thus, the oxide and sulfide samples used were overwhelmingly diluted with the mixed material, such that, for all practical purposes, all of the composites must be considered as mixed oxide.

16.3.2 Gemfield Metallurgical Recovery Projections

Due to the lack of metallurgical test data in half of the oxide-mixed material and 100% of the non-oxide material classifications, recoveries for these materials have been projected based on the differences exhibited in the known classifications. This projection has been partially quantitative and partially qualitative, and has a high degree of uncertainty.

The projections are as displayed in Tables 16-3 to 16-6:

Table 16-3: Oxide-Mixed Mill Recovery by Silicification and Sulfide

	Silicification		
Sulfide	Moderate	Strong	Intense
Weak	98%	94%	92%
Moderate	87%	90%	91%
Strong	-	89%	88%

Table 16-4: Oxide-Mixed Heap Leach Recovery by Silicification and Sulfide

	Silicification		
Sulfide	Moderate	Strong	Intense
Weak	94%	88%	76%
Moderate	84%	83%	72%
Strong	-	76%	65%

Table 16-5: Non-Oxide Mill Recovery by Silicification and Sulfide

	Silicification		
Sulfide	**Moderate**	**Strong**	**Intense**
Weak	66%	49%	39%
Moderate	-	42%	-
Strong	-	41%	-

Table 16-6: Non-Oxide Heap Leach Recovery by Silicification and Sulfide

	Silicification		
Sulfide	**Moderate**	**Strong**	**Intense**
Weak	63%	43%	23%
Moderate	-	34%	-
Strong	-	28%	-

16.4 Preliminary Process Design

In order to develop scoping level capital and operating costs for the process plant facilities, a preliminary process design was developed based on the test work results and conceptual design criteria. The main process areas for the proposed Gemfield and McMahon Ridge project are:

- Crushing
- Dump truck stacking
- Heap leaching
- Carbon-in-column gold and silver recovery
- Carbon treatment circuit (acid wash/strip/regeneration)
- Precious metal electrowinning and smelting
- Utilities.

16.4.1 Crushing

The crushing circuit will operate for 12 hours a day to process the feed from the mine. Mine tonnage is 2,000,000 tpy, or approximately 5,500 tpd. The crushing circuit should be sized for approximately 500 tph. A 250 horsepower (hp) jaw crusher and 400 hp cone crusher should process the feed in open circuit. The circuit is proposed to be a simplistic design similar to semi-mobile or skid-mounted type plants. A front-end loader will be required to feed the crusher. A discharge conveyor will feed the trucks for placement on the pad.

16.4.2 Heap Leaching

Total tonnage from the mine is 16.9 million tons. A pad was sized based on 20 ft (6 m) lifts and a total heap height of 200 ft (61 m). An approximate pad area of 2,700,000 square feet (252,929 m^2) is included in the design (1,650 ft x 1,650 ft or about 503 x 503 m). Due to the low grade of the feed, solution stacking is expected to be required. The pad will be divided into 6 sections, each 275 ft x 1,650 ft (about 84 m x 503 m). Solution will be collected at the toe of each section where it can either flow by gravity to the carbon-in-column (CIC) plant, or be pumped back onto the heap. A storm drainage pond will be required. The estimated total area for the pond is approximately 300 ft x 500 ft x 15 ft deep (91 x 152 x 4.6 m).

16.4.3 CIC System

The CIC system will be sized to process approximately 2,500 gpm of pregnant leach solution (PLS). The system will include:

- Five carbon columns in series, approximately 10 ft diameter by 15 ft tall (3 m diameter by 4.6 m tall)
- CIC plant with fresh water, PLS, barren, caustic, and cyanide tanks
- pregnant solution pumps – 2,500 gpm at 40 ft TDH with 40 hp motor
- miscellaneous reagent, carbon transfer, and area sump pumps.

16.4.4 Carbon Treatment Circuit

The carbon treatment circuit will treat approximately 3.6 tons of carbon per day. The system will include for carbon acid washing, pressure Zadra carbon-strip process, carbon thermal regeneration, precious metal electrowinning and smelting to doré bars.

16.4.5 Utilities

The utilities required for the process facilities include the following:

- Fresh water supply
- Power supply and distribution – including a new primary substation; 4.6 MW connected, 1.5 MW consumed.
- Air compressors (plant and instrument air)
- Administration/Laboratory Complex.

16.5 Conclusions

The test work indicated that both the Gemfield and McMahon Ridge deposits would be amenable to heap leaching. No parameters or deleterious constituents were identified that would preclude this type of precious metal recovery operation.

16.6 Recommendations

The geological model needs to add additional elements to the model, including silver and sulfur, in order to assist in future determination of the different mineralization types for each of the deposits. The test work executed by KCA was on high-grade composites that did not fully cover the mineralization types for each deposit. To further advance the metallurgical understanding of the deposits, it will be necessary to assemble representative composite samples of the mineralization types and the average grades to be mined. Long-term heap leach tests (120 days or greater) will be required for each of the identified mineralization types.

Further test work will be required to optimize the heap leach parameters to support a project prefeasibility study, to generate the necessary environmental information to characterize the waste rock and to characterize the spent material from a heap leach operation. Attention will be required to analyze for potential high cyanide consumers and cyanicides (including cyanide soluble copper, base metal sulfides).

17.0 RESOURCE ESTIMATION

17.1 Gemfield Resource Model Overview

MVG estimated gold resources in the Gemfield deposit from a three-dimensional geostatistical block model generated using the commercially available mining software Vulcan® with supplementary variographic analysis using Isatis®.

In order to evaluate heap leaching, milling, or combined processing options, two PACK models were generated. The first PACK model (INDZONE 1) was designed for low-grade material suitable for a heap leach operation. The second PACK model (INDZONE 2) was designed to outline higher-grade material that could support a mill process. The two domains in the models allowed different economics and recoveries to be applied to each domain, thus providing the basis for mine and process designs. Although silver assays exist and were modeled previously, only gold was estimated in this study.

Analysis of mill-grade resource tonnages revealed that these materials were not sufficient to warrant construction of a mill or toll milling. As a result, the operation was designed as a heap leach mine.

17.2 Gemfield Categorical Gold Composite Statistics

Composites were evaluated by cutoff grades for all composites used in the estimation. Table 17-1 shows the statistics for the uncapped gold composites at four cutoff grades.

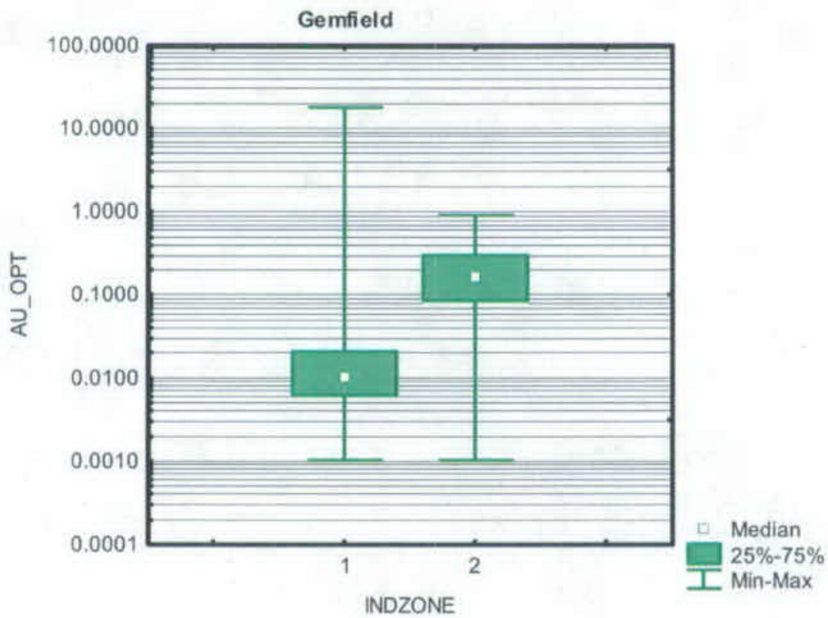
Table 17-1: Gemfield Gold Assays Categorized by Cutoff

Cutoff	0	0.001	0.01	0.02
Number of samples	2773	2704	1478	790
Mean	0.034	0.034	0.058	0.097
Maximum	15.372	15.372	15.372	15.372
Minimum	0.000	0.001	0.010	0.020
Standard deviation	0.309	0.313	0.422	0.574
Coefficient of var.	9.193	9.093	7.269	5.916
Skewness	45.05	44.49	33.07	24.34
Median	0.010	0.010	0.020	0.038
Upper quartile	0.022	0.022	0.040	0.066
Lower quartile	0.006	0.007	0.013	0.025
Percent of Total	100.0%	97.5%	53.3%	28.5%

Note: "Coefficient of var." is coefficient of variation, or the standard deviation divided by the mean.

Figure 17-1 is a box plot that summarizes the gold statistics by domain (composites with a zero value were set to 0.001 oz/st Au for plotting). The minimum and maximum gold grade for each sample type is shown by the vertical whiskers that extend from the boxes. The first and third quartiles are defined by the bottom and top lines that form the boxes. The median grades are shown by the square dot.

Figure 17-1: Gemfield Box Plots of Gold Composites Categorized by Domain



Indzone	1	2
	Low-grade PACK	High-grade PACK
Number of samples	2,693	80
Mean	0.028	0.217
Maximum	15.372	0.900
Minimum	0.000	0.000
Standard deviation	0.310	0.178
Coefficient of var.	11.043	0.823
Skewness	45.8	1.7
Median	0.010	0.170
Upper quartile	0.020	0.290
Lower quartile	0.006	0.097
Percent	97%	3%

17.3 Gemfield Assay Compositing

Assays were composited using the model bench height. No minimum composite length was used since 2,343 composites (22%) have lengths less than 20 ft, with lengths ranging from 0 to 28.16 ft. The zonal control used for generating composite lengths less than 20 ft is unknown. AMEC strongly recommends that a shorter and consistent down-the-hole composite be used for future models. This will help give much better definition the mineralized domains.

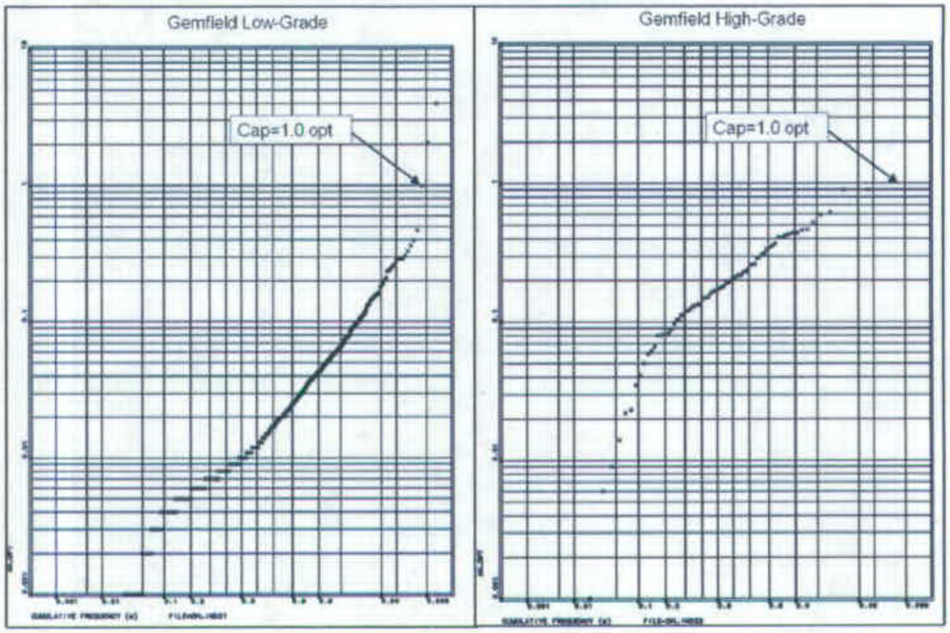
17.4 Gemfield Gold Grade Capping

In mineral deposits with skewed distributions, it is not uncommon for one percent of the highest assays to disproportionately account for over 20% of the total metal content of the deposit. Although these assays are real and reproducible, they show little continuity, add a significant amount of uncertainty, and should be constrained during resource estimation. Reducing the uncertainty of these assays to a manageable level can be undertaken several ways, with the most common being to cap the assay grades above a chosen threshold.

MVG calculated the cap grade in high-grade and low-grade domains by generating cumulative probability distribution plots and selecting breakpoints in the distribution. Results of the capping study resulted in all composites being capped at 1 oz/st Au (Figure 17-2).

The capping approach resulted in assays from the low-grade domain being capped (because of scattered intercepts of high grade in the low-grade domain) and no assays in the high-grade domain being capped. AMEC recommends that the delineation between the high-grade and low-grade domains be re-evaluated so the highest grade composites are contained in the high-grade domain, and that future capping studies use a method that estimates the amount of metal at risk and the spatial relations of data available. AMEC also recommends that the capping studies be performed on the raw assays before compositing.

Figure 17-2: Gemfield: Analyses of Capping Thresholds.



17.5 Gemfield Indicator Discriminators

Low-grade and high-grade indicator fields were added to the composites file to establish low-grade and high-grade domains. For the low-grade domain, a low-grade indicator was established using a discriminator of 0.004 oz/st Au. Assays lower than 0.004 oz/st Au were assigned a value of 0 and assays greater than or equal to 0.004 oz/st Au were assigned a value of 1. The high-grade domain used an indicator discriminator of 0.08 oz/st Au, with assays lower than 0.08 oz/st Au assigned a value of 0 and assays greater then or equal to 0.08 oz/st Au assigned a value of 1. The 0.004 and 0.08 oz/st Au discriminators were based on economics which approximate the breakeven cutoff grade for the lower-grade heap leach and higher-grade mill options, respectively.

17.6 Gemfield Variography

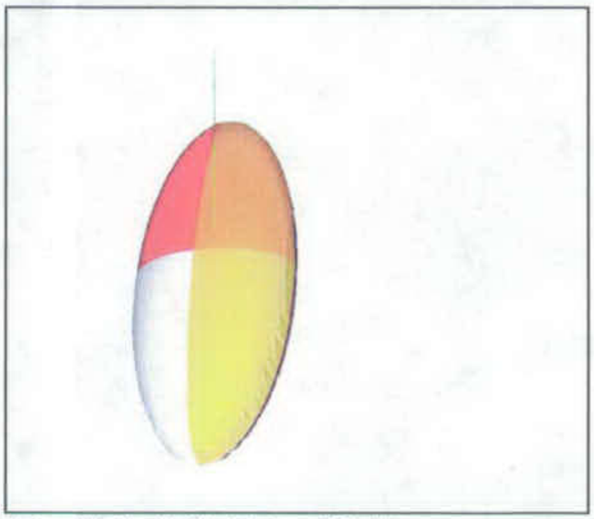
Variograms are used to define the weights used during kriging estimations by quantifying the spatial variability between samples. Variograms quantify the variability between samples due to both the distance between the samples and the direction between the samples. As the variability decreases, correlation increases and the kriging weights increase.

Semi-variograms were calculated for low-grade indicators (Ind), low-grade gold, high grade indicators and high-grade gold on the capped composites using Vulcan® and Isatis® mining software. Directional variograms were first generated to determine the primary axes, and then single-structure exponential variogram models were fitted along the primary axes. In general, all of the gold variograms produced were anisotropic and displayed nuggets that ranged from 33–64% of the sill for the low-grade domain and 45–50% of the sill for the high-grade domain. Variogram modeling parameters are summarized in Table 17-2. Figure 17-3 presents the anisotropy of the variogram parameters for gold in the low-grade domain graphically and is generally representative for the other fields.

Table 17-2: Gemfield Variogram Parameters

	Low-grade Ind	Low-grade Au	High-grade Ind	High-grade Au
Type	Exponential	Exponential	Exponential	Exponential
C0	0.0700	0.0460	0.0193	0.0150
C1	0.1400	0.0260	0.0236	0.0150
Sill	0.2100	0.0720	0.0429	0.0300
Major radius (ft)	680	340	250	100
Semi-major radius (ft)	375	150	150	75
Minor radius (ft)	100	100	50	20
Rotaion around Z	200	200	250	200
Rotation around Y'	-5	-20	-40	-20
Rotation around X'	-20	-20	-20	-20

Figure 17-3: Gemfield, Low-grade Au Variogram Ellipse



Note: Y is North, X is East and Z is Up.

17.7 Gemfield Modeling Methodology, PACK

Resources were generated by MVG using Vulcan® GMP, Version 4.5, Build 661 software and a PACK method. PACK is designed to statistically define economic envelopes around mineralized zones that are difficult to delineate using more traditional methods such as wireframing. Two PACK models were generated. The first PACK model was designed for low-grade material suitable for a heap leach operation and the second PACK model was designed to outline higher grade material that could support a mill. The PACK method was selected in part due to its advantage of easily being updated to reflect changing economic parameters.

17.7.1 Gemfield Prototype model

A Vulcan® prototype block model was first generated and trimmed to topography with the proportion of the block lying below topography recorded as a majority code. The block model extends well past the known mineralization. The extent and dimensions of the block models are summarized in Table 17-3 and displayed in Figure 17-4.

17.7.2 Gemfield Domains and Estimation Parameters

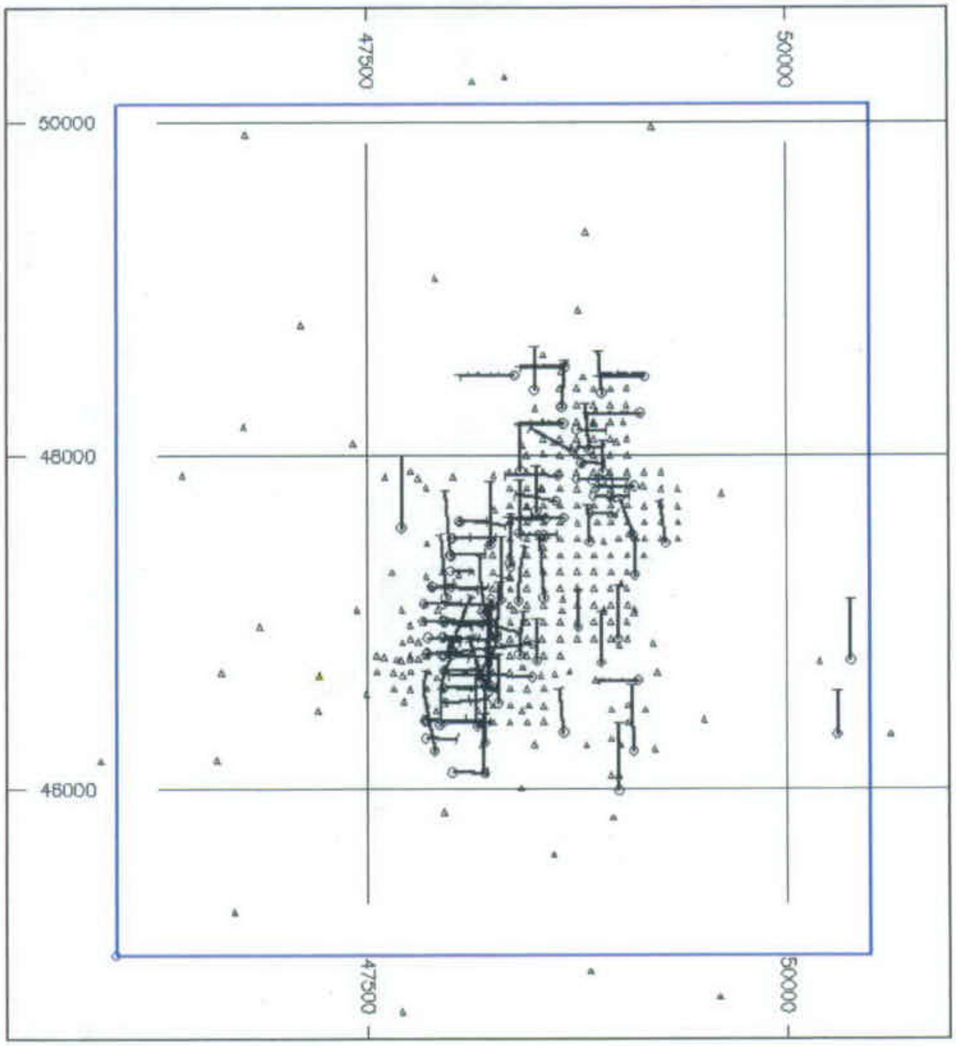
A low-grade domain was first established by ordinary kriging the low-grade indicators. Blocks with a kriged low-grade indicator values greater than or equal to 0.5 were selected as best representing the low-grade domain. Gold composites located inside the low-grade indicator envelope greater than or equal to 0.5 were flagged and only those composites were used to estimate the gold values using ordinary kriging. Blocks with indicator values less than 0.5 were assigned a value of zero. The selection of 0.5 was determined visually as best representing the limit of the low-grade mineralization.

A high-grade domain was then established by ordinary kriging the high-grade indicators. Blocks with a kriged high-grade indicator values greater than or equal to 0.5 were selected as best representing the high-grade domain. Gold composites located inside the high-grade indicator envelope with an indicator value greater than or equal to 0.5 were flagged and only those composites were used to estimate the gold values using ordinary kriging. The indicator models were then trimmed to exclude all lithologies that were not Sandstorm Rhyolite or ledge material.

Table 17-3: Gemfield Block Model Limits

	Origin	Max Coordinate	Block Size (ft)	No. Blocks	Model Extent (ft)
Easting (X)	46,000	50,500	30	145	4,500
Northing (Y)	45,000	50,100	30	170	5,100
Elevation (Z)	4,500	5,700	20	59	1,200

Figure 17-4: Plan Map of Gemfield Drill Holes and the Model Limit (blue line)



The low-grade and high-grade models were then combined with the high-grade model being "stamped" on top of the low-grade model. In general, the PACK indicator envelopes restrict ore-grade assays from smearing into waste zones, and restrict waste assays from diluting the ore. Modeling parameters for Gemfield are summarized in Table 17-4.

For resource estimation, the axes of the search ellipsoids were aligned with the axes of the variogram models and the distances along each axis were set the same as the variogram ranges. Within the search ellipsoid, a maximum of eight composites were used, with no more than two composites coming from a single drill hole. In the low-grade domain, 84% of the blocks were estimated with the 8 closest samples, while most of the blocks in the high-grade zone were estimated using 2–6 samples.

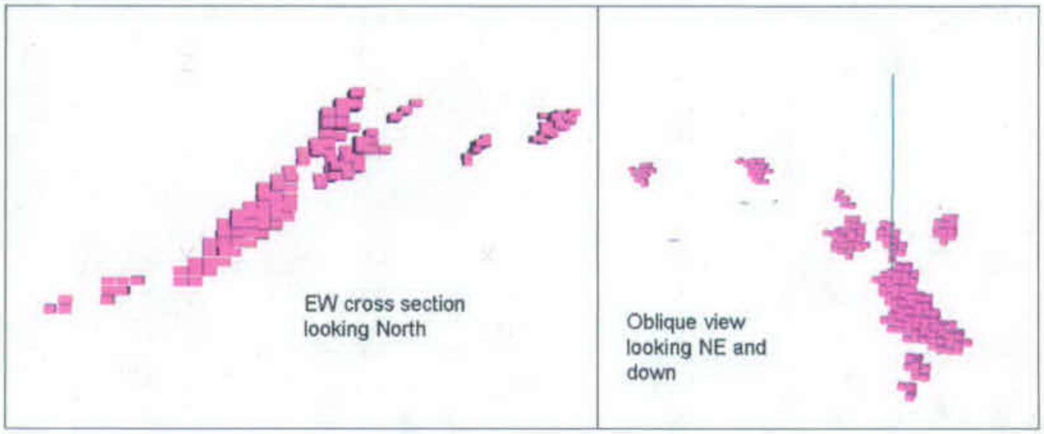
Table 17-4: Gemfield Search and Modeling Parameters

	Low-grade Ind	Low-grade Au	High-grade Ind	High-grade Au
Major axis radius (ft)	680	340	250	100
Semi-major axis radius (ft)	375	150	150	75
Minor axis radius (ft)	100	100	50	20
Azimuth, rotation around Z	200	200	250	200
Plunge,, rotation around X'	-5	-20	-40	-20
'Dip', rotation around Y'	-20	-20	-20	-20
Min # Samples	2	2	2	2
Max # Samples	8	8	8	8
Max # Samples per drillhole	2	2	2	2

Since the composites are quite variable in length, the ordinary kriging weights were multiplied by the length of the sample and then renormalized to sum to one during estimation. Model blocks were estimated using a using a 3 by 3 by 2 discretization grid.

Mineralization at Gemfield is believed to conform to structures and areas of increased porosity within the Sandstorm Rhyolite. In general, these structures are silicified and locally referred to as ledges. The Gemfield variography and search parameters correlated to the geometry of the ledge material. The high-grade indicator domain correlates to the ledge material and the low-grade domain correlates to mineralized Sandstorm Rhyolite surrounding the ledges. The high-grade domain strikes roughly 20° and dips 20 to 50° west with a prominent rake (pitch) to the south–southwest (Figure 10-5).

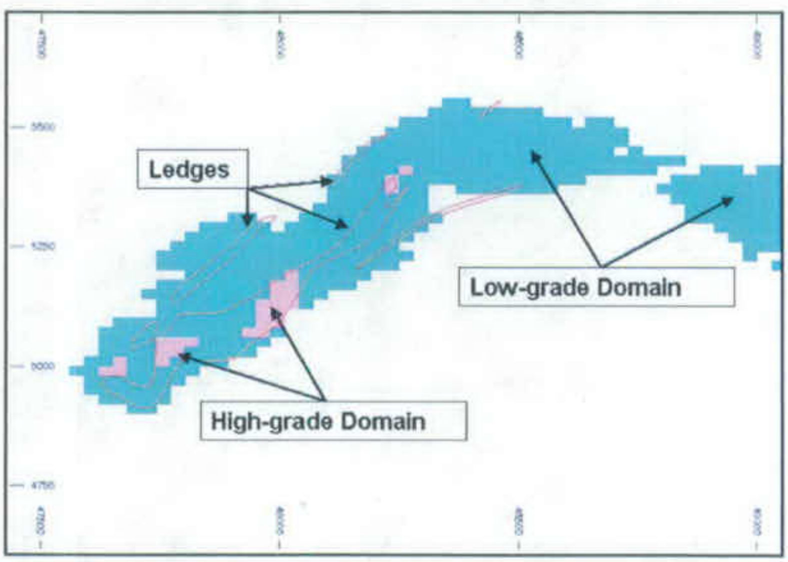
Figure 17-5: East–West Cross-section and Oblique View of the Gemfield High-grade Domain



Note: Y is North, X is East and Z is up. No Scale.

In general, the low-grade Sandstorm Rhyolite surrounds the higher-grade ledges. Since the gold mineralization and silicification are not a perfect correlation, higher-grade ledge material is included in the low-grade domain and lower-grade rhyolite is included in the high-grade domain (Figure 17-6).

Figure 17-6: East–West Cross Section of Gemfield at 46780 North Showing the Relationships Between Domains and Ledges



17.7.3 Gemfield Density Model

Eight rock types were defined and each rock type was assigned a tonnage factor (Table 17-5).

In the resource model, rock types with similar tonnage factors (13.5, 14.5, and 15.75 cubic feet per short ton) were consolidated into three density categories and wire-framed. The wire-frames were then used to assign tonnage factors into the model blocks. All blocks outside of the wireframes were assigned a tonnage factor of 15.672 cubic feet per short ton. The tonnage factor information was obtained from drill hole core but documentation of how the final tonnage factors were calculated was not available.

Table 17-5: Tonnage Factors Used in the Gemfield Model

Rock Type	Tonnage Factor (ft^3/short ton)
Low Sulfide Ledge (Oxide and Mixed Redox Zones)	13.500
High (>5%) Sulfide Ledge (Oxide and Mixed Redox Zones)	13.500
Sulfide Ledge (Below Mixed/Sulfide Redox Boundary)	13.500
Silicified Sandstorm (Oxide and Mixed Redox Zones)	14.500
Silicified Sandstorm (Below Mixed/Sulfide Redox Zoundary)	14.500
Clay-rich Sandstorm (Oxide and Mixed Redox Zones)	15.750
Clay-rich Sandstorm (Below Mixed/Sulfide Redox Boundary)	15.750
Other	15.672

17.7.4 Gemfield Metallurgical Model

A metallurgical model was built to facilitate the application of the metallurgical recovery matrix developed for Gemfield. The metallurgical recovery matrix requires that three variables are estimated for each block in the resource model. These are: an oxide class, a silicification class, and a sulfide class. Each of these variables was estimated using ordinary kriging and the appropriate logged geological descriptor. The three variables were estimated independently.

The basic kriging plan used for each of the variables was similar. The variables were all estimated using indicators. The deposit was divided into two domains: one representing the apparently flat laying eastern portion and the other representing the westerly dipping portion. The drill data was composited into 10-ft fixed length composites. Each of the indicator variables was estimated with a minimum of 8 composites and a maximum of 6 composites from any one drill hole, and a maximum of 6 composites from any octant. A maximum of 48 composites were used. This selection ensured that there were at least two informed octants using data from at least two drill holes to make an estimate. The block being estimated was discretized using a 4 m by 4 m by 2 pattern.

Oxide Code

Oxidation was visually logged for each drilling interval and degree of oxidation assigned a code, depending on whether the level was considered to be oxide, sulfide or mixed. The oxide model was built using three exclusive indicators, one for each of the three possible values. The oxide indicator was set to 1 if the drill interval was logged as oxide and 0 if mixed or sulfide. The mixed indicator was set to 1 if the drill interval was logged as mixed and 0 if oxide or sulfide. Similarly, the sulfide indicator was set to 1 if logged as sulfide and 0 if logged as oxide or mixed. Variograms were then fitted for each of the indicators for the two domains. The indicator values were estimated using ordinary kriging. A single oxide code was then produced to correspond to the indicator with the highest probability (kriged value).

Silicification Code

The alteration visible within each drill interval was logged into one of twelve possible alteration types, one of which was silicification. The degree of alteration was further quantified into weak, moderate, strong, and intense. Up to two alteration types were logged for each interval, a primary alteration and a secondary alteration. The alteration type primarily associated with the gold mineralization and the metallurgical recovery was silicification. The silicification was estimated using multiple indicator kriging with four indicator variables representing the weak, moderate, strong and intense alteration. The indicators were set progressively. If the interval was logged as weak, the first indicator was set to 1 and the next three to 0. If the interval was logged as moderate, the first two indicators were set to 1 and the last two to zero, with the same pattern continuing for strong and intense. The indicators were set if either of the primary of secondary alteration was logged as silicification. If the interval was not logged as containing silicification, all indicators were set to zero. Variogram models were fitted for each of the indicators for each of the two domains. The indicators were then kriged independently using ordinary kriging. A single silicification code was then assigned to each block ranging from 1 to 5, where 1 was no silicification and 5 was intense silicification.. The code was set to the highest indicator with a probability greater of equal to 0.50.

Sulfide Code

When discernible sulfides were present within a drill hole interval, the quantity of sulfides was visually estimated. The level of sulfides was estimated using multiple indicator kriging, using three indicators, and then classified as weak, moderate or strong. If the logged sulfide was zero, all three indicators were set to zero. If the sulfide was greater than zero and less than 1% the first indicator was set to 1 and the last two to 0. If the sulfide was greater than or equal to 1% and less than 5% the first two indicators were set to 1 and the last one to 0. If the sulfide was greater than or equal to 5% all three indicators were set to 1. Variogram models were fitted for each of the indicators for each of the two domains. The indicators were then kriged independently using ordinary kriging. A single sulfide code was then assigned to each block ranging from 1 to 4, where 1 was no sulfide and 4 was strong sulfide. The code was set to the highest indicator with a probability greater of equal to 0.50.

17.8 AMEC Checks and Verification of Gemfield Model

17.8.1 Visual Comparisons

Estimated block model gold grades were visually examined in cross section and level plan by comparing them with the composites in the drill holes. Three examples are shown, as Figures 17-7 to 17-9. In general, the blocks follow the mineralized horizons of the Sandstorm Rhyolite. In the eastern portion of the deposit (X>48,350) the overall geometry of the mineralization is flat-lying, and in the western portion (X<48,350) the mineralization dips to the southwest. In general, the model appears to correspond with the drill hole composites relatively well. It should be noted that the high-grade domain accounts for two percent of the total tons and 15 percent of the total ounces in the model. AMEC believes that the high-grade domain is too restrictive, and could be expanded to include more of the higher-grade composites. This would also reduce the smearing of these high-grade samples in the low-grade domain.

Figure 17-7: Gemfield East–West Section — 46,580 North, Looking North

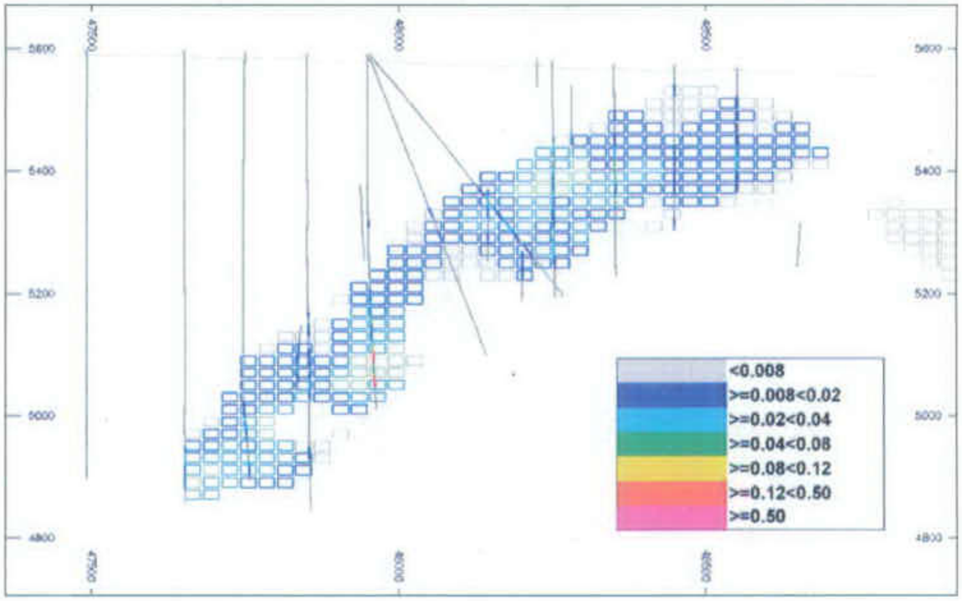


Figure 17-8: Gemfield East–West Section — 46,800 North, Looking North

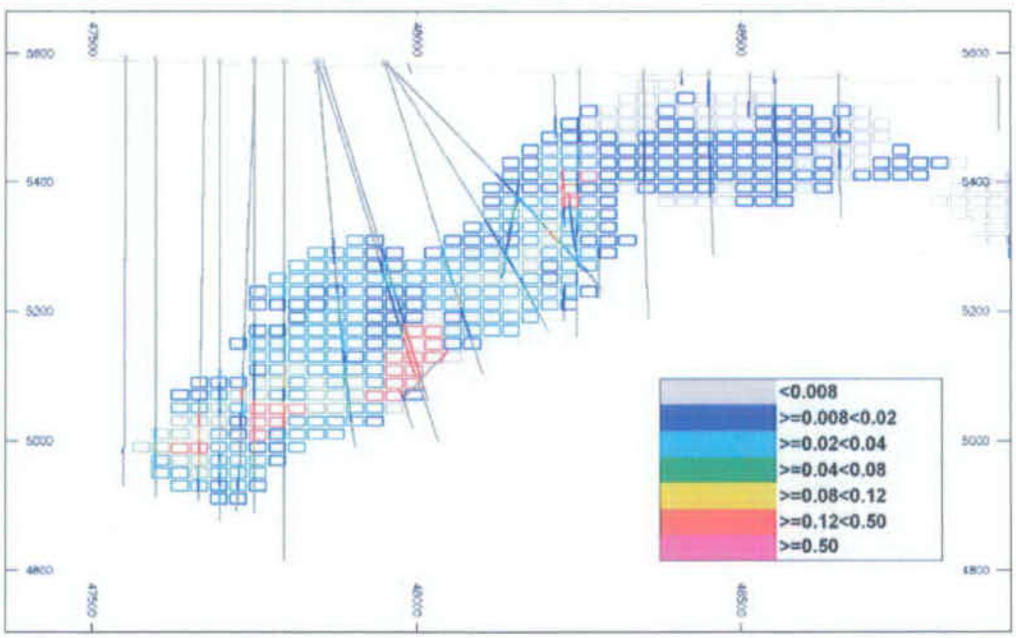
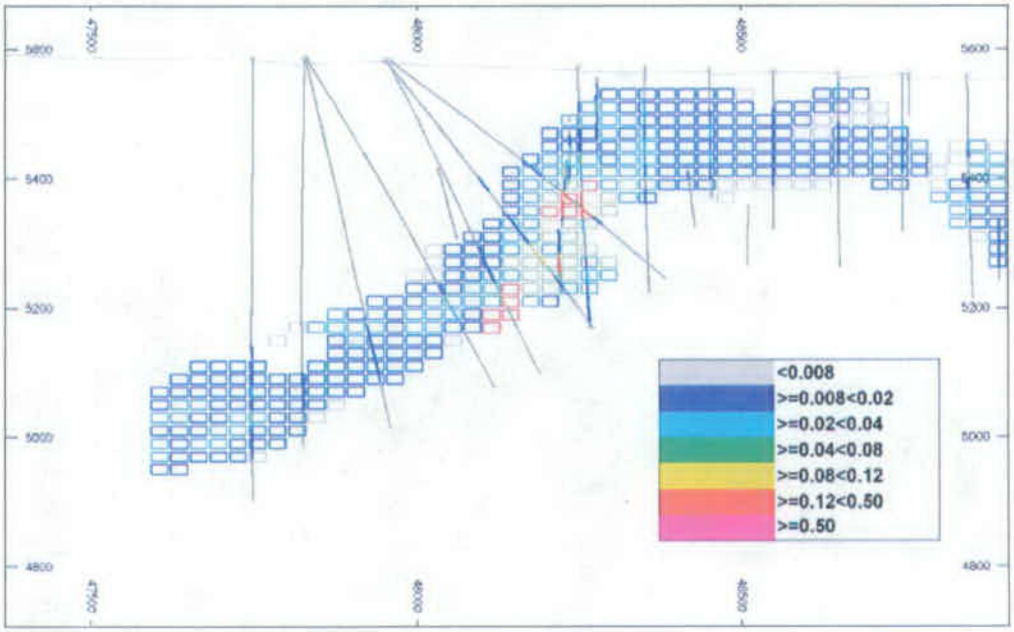


Figure 17-9: Gemfield East–West Section — 46,980 North, Looking North



17.8.2 AMEC Analysis of Change-of-Support for Gemfield Model

A preliminary check on the smoothness of the resource model was evaluated using the discrete Gaussian or Hermitian polynomial change-of-support method (Herco). This method calculates the distribution of block grades expected during mining given the size of the selective mining unit (SMU). Herco first creates the expected SMU distribution to be encountered during mining and then calculates tons and grade for that SMU that can be compared to tons and grade in the resource model over a series of cutoff grades. If the resource model has predicted the tons and grades adequately, the grade-tonnage curves for the expected SMU–sized blocks should match the resource model, and the resource model should be a good predictor of tons and grade during mining. If the curves diverge significantly, the smoothness of the resource model needs to be adjusted.

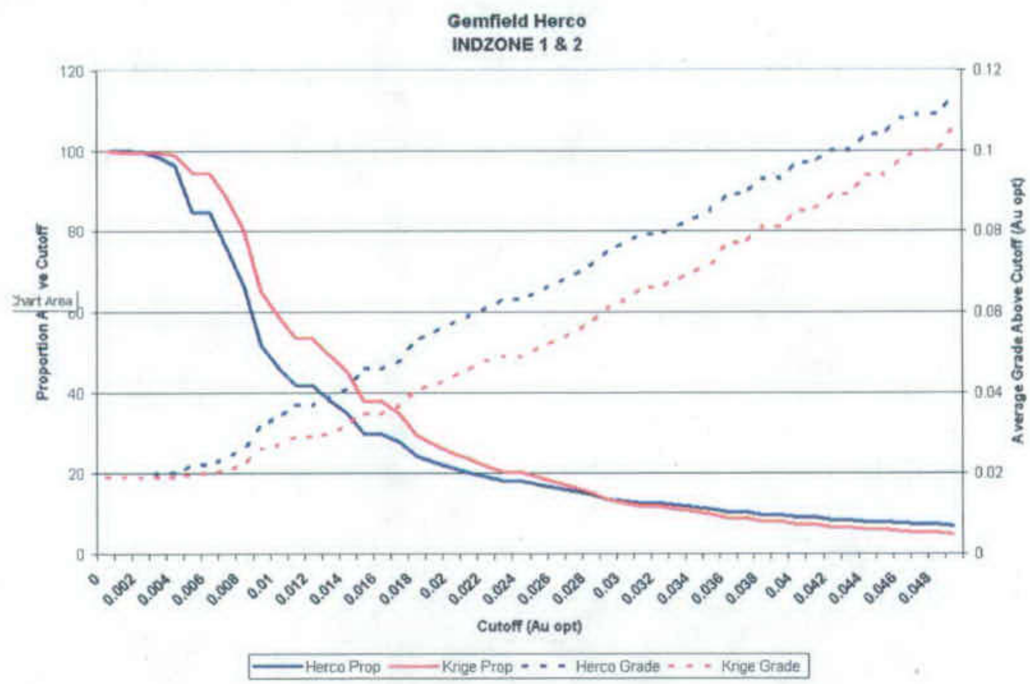
The change of support analysis requires a declustered composite file, the dimensions of the expected SMU and the variance of the expected SMU distribution. Declustering the composites was performed using a nearest neighbor model and all estimated blocks within the indicator envelopes.

An assumed SMU size of 9.75 by 9.75 by 6.00 m (32 by 32 by 20 ft) was used, based on comparisons to active mines. The declustered composites distribution was then transformed into a distribution having the same mean as the declustered composites and the same variance of the expected SMU blocks. This change-of-support SMU model reflects the expected tons and grades to be encountered during mining and can be graphed against the kriged model to easily determine whether the kriged model is biased high or low at a given cutoff grade.

Grade and tons are plotted against cutoff for the low-grade domain (Figure 17-10). The distribution of tons and grades based upon the change-of-support model are shown with blue lines. The solid blue line is the tons and the dashed blue line is the average grade above a given cutoff grade. The red lines show the tons (solid red) and grade (dashed red) of the kriged block estimate.

Normally the curves of the Herco-corrected nearest neighbor and the kriged estimates are expected to be close to each other. In the Gemfield model the analyses suggests that the model is overly smoothed and will over-predict tons by 15–25% while underestimating grade by 15–20% (variances fluctuate with changes in cutoff grade). Although the high-grade zone could not be evaluated since variogram analyses and variance reduction factor were unreliable due to the small number of samples, a change-of-support analysis was performed on the high-grade and low-grade domains combined with similar results.

Figure 17-10: Gemfield Change-of-Support Evaluation



AMEC recommends that future models reduce the number of high-grade composites in the low-grade zone to keep the high-grade and low-grade domains more distinct and the drill hole assays should not be composited using the domains of the previous model.

17.8.3 AMEC Check for Bias in Gemfield Model

The block model was checked for global bias by comparing the average metal grades (with no cutoff) from the model (kriged grades) with means from nearest-neighbor estimates for all blocks inside the indicator envelopes. The nearest-neighbor estimator produces a theoretically unbiased estimate of the average value when no cutoff grade is imposed and is a good basis for checking the performance of different estimation methods. Table 17-6 categorizes the bias by domains. Although the low-grade domain demonstrates a minimal bias, the 6.1% bias in the high-grade domain will need to be addressed in future models to provide better local estimates of grades in this domain.

Table 17-6: Gemfield Bias Checks Globally and by Domain

Domain	Kriged Au Grade	Nearest Neighbor Au Grade	Percent Difference
Global	0.0186 opt	0.0193 opt	-3.6%
Low-Grade	0.0165 opt	0.0176 opt	-6.3%
High-Grade	0.2287 opt	0.2155 opt	6.1%

AMEC also checked for local trends in the grade estimates (swath checks). This was done by plotting the mean values from the nearest-neighbor estimate versus the kriged results for all blocks within the indicator envelopes in east–west, north–south and vertical swaths. Due to the low number of samples in the high-grade domain, the low-grade and high-grade domains were combined. In general, the kriged and nearest neighbor models follow each other relatively well although the kriged model shows less variance (smoother) and higher variability locally as shown in Figures 17-11 to 17-13. The blue line is the grade of the kriged model, the red line is the grade of the nearest-neighbor model, and the green line is the relative ratio between the kriged and nearest neighbor model. The relative ratio is expected to be within limits of ± 5%, which are shown by the dashed black lines (upper and lower control limits).

Figure 17-11: North-South Swath Plots for the Gemfield Model

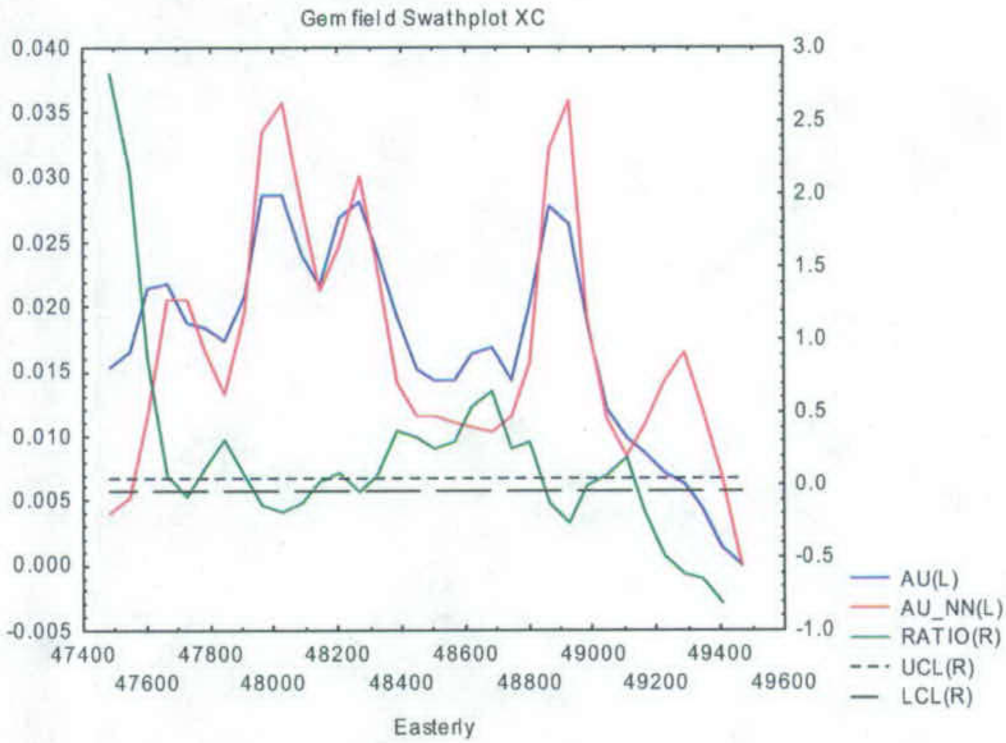


Figure 17-12: East–West Swath Plots for the Gemfield Model

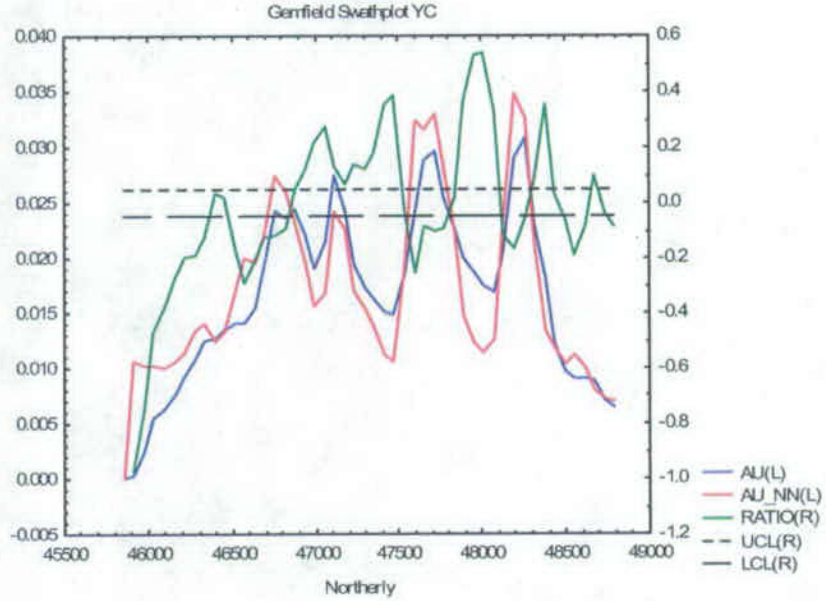
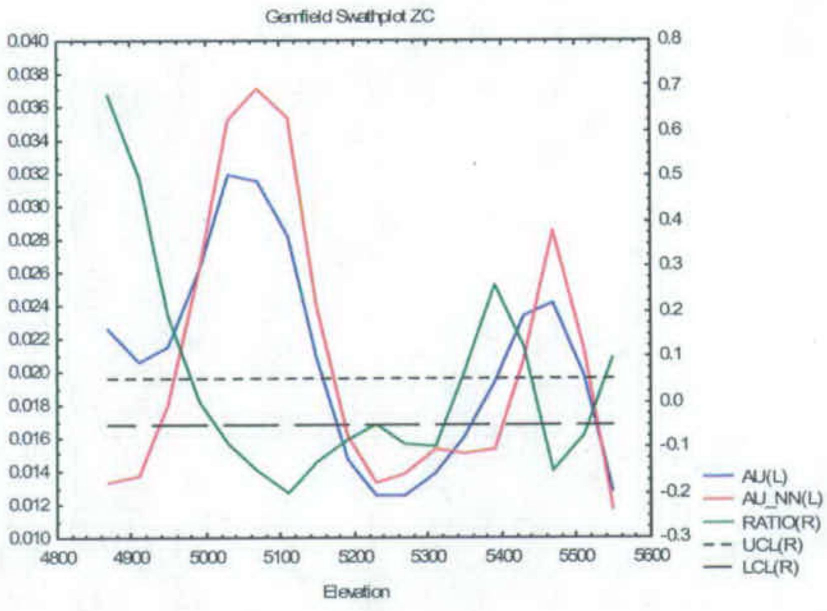


Figure 17-13: Vertical Swath Plots for the Gemfield Model



17.9 Gemfield Mineral Resource Classification

AMEC has found that for precious metal resources, drill hole spacing should be close enough to estimate the grade and tonnage within ± 15% at 90% confidence on a quarterly basis to be classified as Measured and within ± 15% at 90% confidence on an annual basis to be classified as Indicated. Using simulations, AMEC calculated the drill hole spacing that would produce these levels of certainty. To meet these requirements for the low-grade domain, a nominal 18 m by 18 m (60 ft by 60 ft) drill hole spacing is required for resources to be classified as Measured and a nominal 27 m by 27 m (90 ft by 90 ft) drill hole spacing is required for resources to be classified as Indicated. For the high-grade domain, a nominal 30 m by 30 m (100 ft by 100 ft) drill hole spacing is required for resources to be classified as Measured and a nominal 55 m by 55 m (180 ft by 180 ft) drill hole spacing is required for resources to be classified as Indicated. The difference between the low-grade and high-grade classifications is due to the higher coefficient of variation in the low-grade domain due to the inclusion of high-grade assays. All confidence limits were based on an assumed daily production rate of 5,500 tpd. In addition, Measured and Indicated resources were required to use at least three and two drill holes, respectively, in the estimation.

Implementation of this classification was performed by calculating the distances to the two nearest holes as summarized in Table 17-7. All blocks that were estimated within the indicator shells but did not meet the Measured or Indicated requirements were classified as Inferred. It is AMEC's opinion that this resource classification meets the standards established by the CIM as specified in NI43–101. In this study, all blocks that were estimated, regardless of their classification, were used in pit designs.

Table 17-7: Criteria for Implementation of Resource Classification for Gemfield Model

	Distance to First Drill Hole	Distance to Second Drill Hole	Number of Drill Holes
Low-grade Measured	<=45 feet	<=78 feet	>=3
Low-grade Indicated	<=68 feet	<=117 feet	>=2
High-grade Measured	<=75 feet	<=130 feet	>=3
High-grade Indicated	<=135 feet	<=234 feet	>=2

17.10 McMahon Ridge Resource Model Overview

In general, the methodology used for modeling the McMahon Ridge deposit is similar to the method used for Gemfield. Both deposits modeled low-grade and high-grade zones that closely follow the silicified ledge material and both were modeled using a two-phase PACK modeling methodology. The first PACK model was designed for low-grade material suitable for a heap leach operation and the second PACK model was designed to outline higher grade material more suitable to support a milling operation. The main differences in modeling methodology between Gemfield and McMahon Ridge include:

1. Different indicator thresholds used for defining the mineralized envelopes; the McMahon Ridge model used a 0.3 indicator threshold (Gemfield used a 0.5 indicator threshold).

2. Different capping thresholds; McMahon Ridge used a 3 opt capping threshold (Gemfield used a 1 opt capping threshold).

3. Different drill hole composite lengths; McMahon Ridge assays were composited on 15 foot lengths down-the-hole (Gemfield assays were composited on 20 foot bench height).

4. The McMahon Ridge model such as capping thresholds, drill hole compositing, and density were carried over from earlier models that were generated using sub-celled blocks based on ledge and non-ledge domains (the Gemfield model is an entirely new model, except for the drill hole compositing strategy).

17.11 McMahon Ridge Categorical Gold Composite Statistics

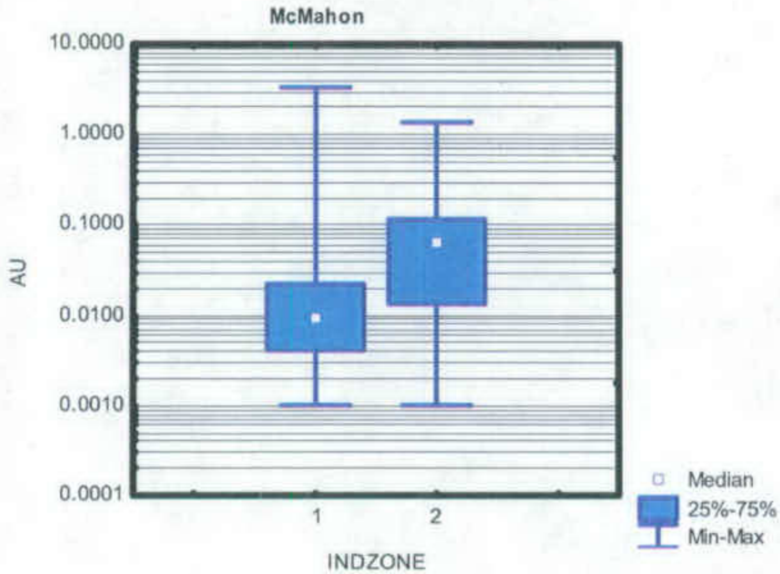
Composites were evaluated by cutoff grades for all composites used in the estimation. Table 17-8 shows the statistics for the uncapped gold composites at four cutoff grades.

Table 17-8: Gold Assays Categorized by Cutoff

Cutoff	0	0.001	0.01	0.02
Number of samples	2233	2067	1131	668
Mean	0.032	0.034	0.059	0.091
Maximum	3.216	3.216	3.216	3.216
Minimum	0.000	0.001	0.010	0.020
Standard deviation	0.127	0.132	0.175	0.222
Coefficient of var.	3.991	3.837	2.949	2.445
Skewness	16.57	16.00	12.21	9.67
Median	0.010	0.011	0.024	0.041
Upper quartile	0.024	0.026	0.048	0.077
Lower quartile	0.004	0.005	0.014	0.027
Percent of Total	100.0%	92.6%	50.6%	29.9%

Figure 17-14 is a box plot that summarizes the gold statistics by domain (assays with a value of zero were set to 0.001 opt Au for plotting). The minimum and maximum gold grade for each sample type is shown by the vertical "whiskers" that extend from the boxes. The first and third quartiles are defined by the bottom and top lines that form the boxes. The median grades are shown by the square dot.

Figure 17-14: Box Plot of Gold Composites Categorized by Domain



Indzone	1	2
	Low-grade PACK	High-grade PACK
Number of samples	2,099	134
Mean	0.028	0.101
Maximum	3.216	1.350
Minimum	0.000	0.000
Standard deviation	0.122	0.177
Coefficient of var.	4.440	1.755
Skewness	18.9	4.7
Median	0.009	0.063
Upper quartile	0.022	0.118
Lower quartile	0.004	0.012
Percent	94%	6%

17.12 McMahon Ridge Assay Compositing

The drill hole assay intervals were composited into down-hole composites of 15 feet within lithologic zones from a previous model. Breaks in the lithology, as originally coded, were honored so that high-grade ledge material was not blurred with non-ledge. Since the ledge intervals are often short, the resulting composite file has composites with variable lengths, including many shorter composites that span small intervals originally coded as ledge. As with Gemfield, the domain code of each

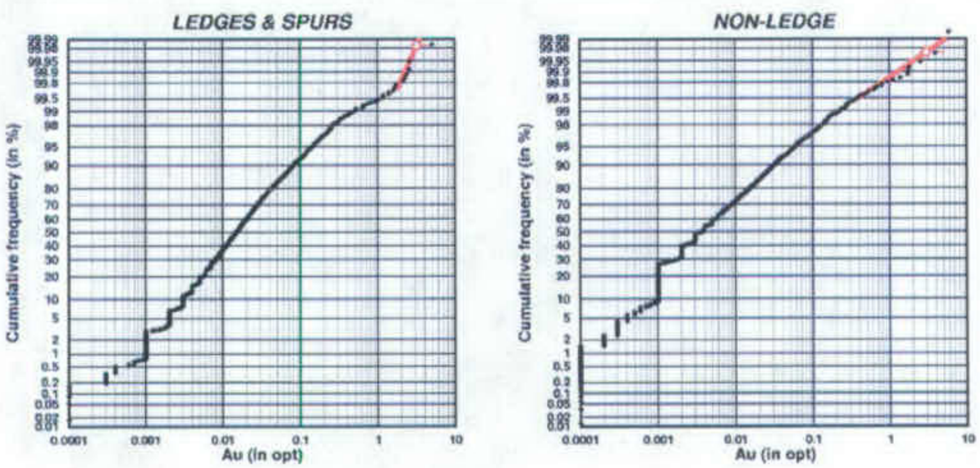
McMahon Ridge composite is the domain as originally logged (and not as back-flagged from the domain wireframes).

AMEC recommends that the compositing methodology should be based on the new indicator domains and not the historic domains based on lithology. AMEC also suggests that a shorter and consistent composite length be evaluated for future models to help give better definition to the mineralized domains.

17.13 McMahon Ridge Gold Grade Capping

MVG calculated the cap grade by the domains used in the previous model (ledges/spurs and non-ledge) grade domains by extrapolating the continuous part of the cumulative probability distribution, and calculating the grade on this extrapolated line that best corresponds to the percentiles of the erratic high grade assays. Results of the capping study resulted in all composites being capped at 3 opt Au (Figure 17-15).

Figure 17-15: McMahon Ridge – Analyses of Capping Thresholds



The capping resulted in only two assays from the low-grade domain being capped and no assays in the high-grade domain being capped.

AMEC recommends that the delineation between the high-grade and low-grade domains be refined to minimize the number of highest grade composites in the low-grade domain, and that future capping studies be performed using the new domains and a method that estimates the amount of metal at risk and the spatial relations of data available. Capping studies should also be performed on the raw assays before compositing.

17.14 McMahon Ridge Indicator Discriminators

To establish a low-grade and a high-grade domain, a low-grade and a high-grade indicator field were added to the composites file. For the low-grade domain, a low-grade indicator was established using a discriminator of 0.004 opt Au. Assays lower than 0.004 opt Au were assigned a value of 0 and assays greater than or equal to 0.004 opt Au were assigned a value of 1. The high-grade domain used an indicator discriminator of 0.08 opt Au with assays lower than 0.08 opt Au assigned a value of 0 and assays greater then or equal to 0.08 opt Au assigned a value of 1. The 0.004 and 0.08 opt Au discriminators were based on economics which approximate the breakeven cutoff grade for the lower-grade heap leach and higher-grade mill options, respectively.

17.15 McMahon Ridge Variography

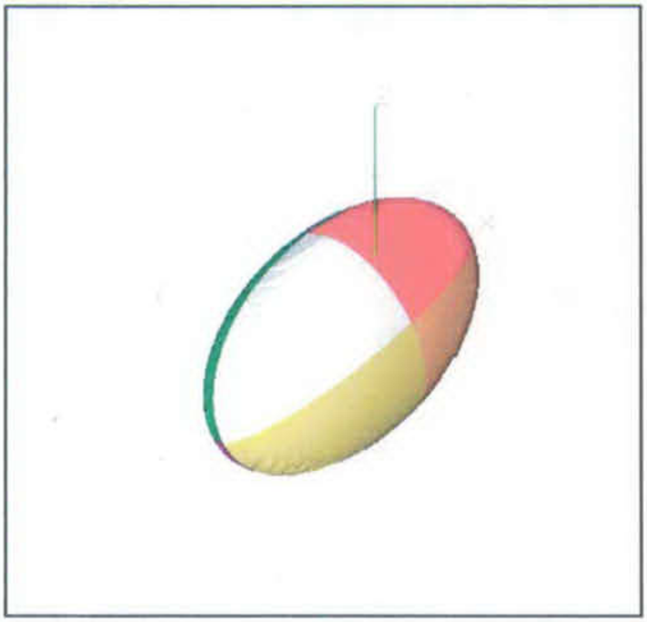
Variograms are used to define the weights used during kriging estimations by quantifying the spatial variability between the samples. Variograms quantify the variability between samples due to both the distance between the samples and the direction between the samples. As the variability decreases, correlation increases and the kriging weights increase.

Semi-variograms were calculated for low-grade indicators, low-grade gold, high-grade indicators and high-grade gold for the capped composites using Vulcan® and Isatis®. Directional variograms were first generated to determine the primary axes and then single-structure spherical variogram models were fitted along the primary axes. In general, all of the gold variograms produced were anisotropic and displayed nuggets that ranged from 33–66% of the sill for the low-grade domain and 81% of the sill for the high-grade domain. Variogram modeling parameters are summarized in Table 17-9. Figure 17-16 presents the variogram parameters for gold in the low grade domain graphically which is generally representative for the other fields.

Table 17-9: McMahon Ridge Variogram Parameters

	Low-grade Ind	Low-grade Au	High-grade Ind	High-grade Au
Type	Spherical	Spherical	Spherical	Spherical
C0	0.0566	0.0088	0.0220	0.0220
C1	0.1315	0.0045	0.0050	0.0050
Sill	0.1881	0.0133	0.0270	0.0270
Major radius (ft)	250	120	130	100
Semi-major radius (ft)	125	65	80	50
Minor radius (ft)	100	30	15	25
Rotaion around Z	285	280	290	290
Rotation around Y'	-5	-10	-10	-10
Rotation around X'	45	70	50	50

Figure 17-16: McMahon Ridge, Low-grade Au Variogram ellipse



Note: Y is North, X is East and Z is Up.

17.16 McMahon Ridge Modeling Methodology, PACK

Resources were generated using the commercially available mining software Vulcan® GMP, Version 4.5, Build 661 with a PACK method. PACK is designed to statistically define economic envelopes around mineralized zones that are difficult to define and delineate using more traditional methods such as wireframing. Two PACK models were generated. The first PACK model was designed for low-grade material suitable for a heap leach operation and the second PACK model was designed to outline higher grade material that could support a mill. The PACK method was selected in part due to its advantage of easily being updated with changing economic parameters.

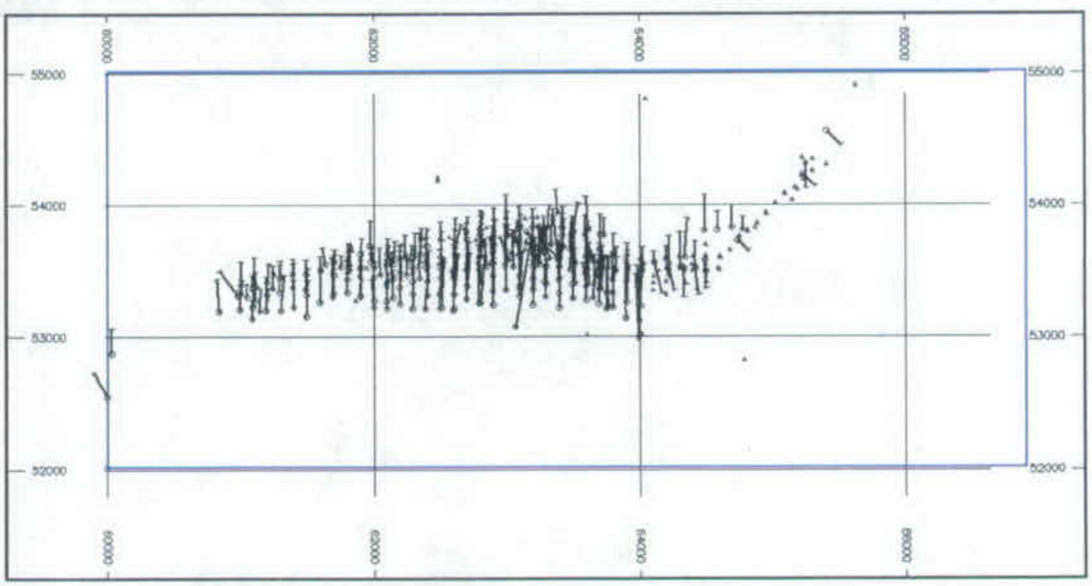
17.16.1 McMahon Ridge Prototype model

A Vulcan® prototype block model was first generated and trimmed to topography with the proportion of the block lying below topography recorded to as a majority code. The block model extends well past the known mineralization. The extent and dimensions of the block models are summarized in Table 17-10 and the extents of the model is displayed in Figure 17-17. When the recovery and densities were later updated, the model was reduced in size so the final model is somewhat smaller than the original model used for gold estimation but still extends past the known mineralization.

Table 17-10: McMahon Ridge Block Model Limits

	Origin	Max Coordinate	Block Size (ft)	No. Blocks	Model Extent (ft)
Easting (X)	60,000	66,900	30	230	6,900
Northing (Y)	52,000	55,000	30	100	3,000
Elevation (Z)	4,000	6,000	20	100	2,000

Figure 17-17: Plan Map of McMahon Ridge Drill Holes and the Model Limits (blue line).



17.16.2 McMahon Ridge Domains and Estimation Parameters

A low-grade domain was first established by ordinary kriging the low-grade indicators. Blocks with a kriged low-grade indicator value greater than or equal to 0.3 were selected as best representing the low-grade domain. Gold composites located inside the low-grade indicator envelope greater than or equal to 0.3 opt Au were flagged and only those composites were used to estimate the Au values using ordinary kriging. Blocks with indicator values less than 0.3 opt Au were not estimated and assigned a value of zero. The selection of 0.3 opt Au was determined visually as best representing the limit of the low-grade mineralization.

A high-grade domain was then established by ordinary kriging the high-grade indicators. Blocks with a kriged high-grade indicator values greater than or equal to 0.3 opt Au were selected as best representing the high-grade domain. Gold composites located inside the high-grade indicator envelope greater than or equal to 0.3 opt Au were flagged and only those composites were used to estimate the Au values using ordinary kriging.

The low-grade and high-grade models were then combined with the high-grade model being "stamped" on top of the low-grade model. In general, the PACK indicator envelopes restrict ore-grade assays from smearing into waste zones and restrict waste assays from diluting the ore. Modeling parameters for McMahon Ridge are summarized in Table 17-11.

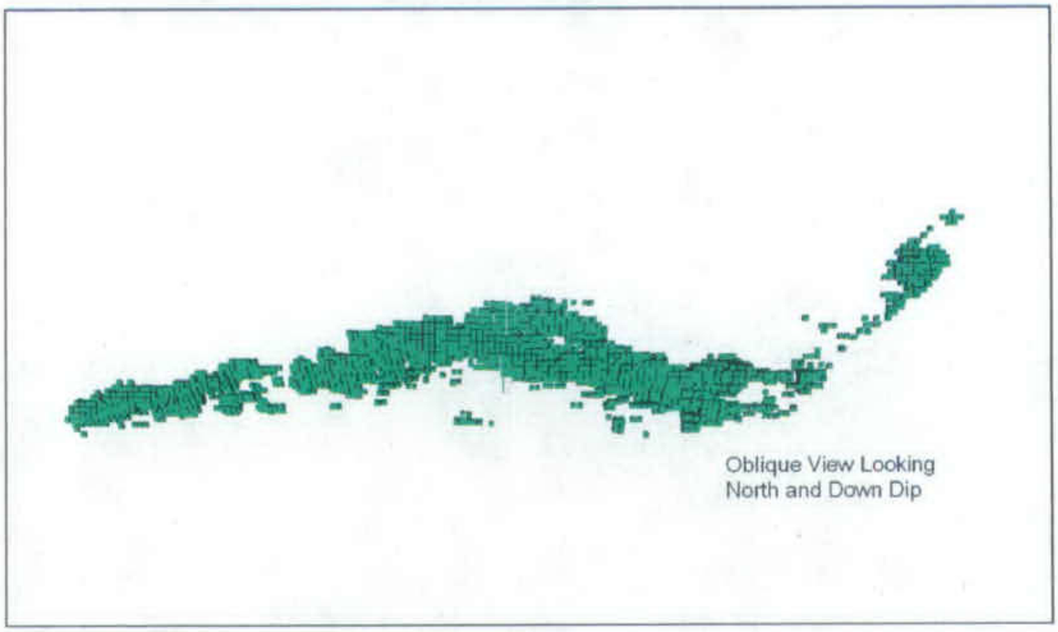
Table 17-11: McMahon Ridge Search and Modeling Parameters

	Low-grade Ind	Low-grade Au	High-grade Ind	High-grade Au
Major axis radius (ft)	300	150	150	100
Semi-major axis radius (ft)	150	80	90	50
Minor axis radius (ft)	125	50	15	25
Azimuth, rotation around Z	285	280	290	290
Plunge,, rotation around X'	5	-10	-10	-10
'Dip', rotation around Y'	45	70	50	50
Min # Samples	1	1	1	1
Max # Samples	8	8	8	8
Max # Samples per drillhole	2	2	2	2

The axes of the search ellipsoids were aligned with the axes of the variogram models (except the rotation for the Y axis in the low-grade indicator domain which was changed from -5 to 5) and the distances along each axis were increased from 0 to 50 feet so they were the same or slightly larger than the variogram ranges. Although the minimum number of samples was set to one, eight samples were used to estimate a block in 100% of the blocks in the low-grade zone and 87% of the blocks in the high-grade domain. Although setting the minimum number of samples to one is not an issue, AMEC still recommends that a minimum number of samples used in the modeling parameters should be no lower than three. Since the composites are quite variable in length, the ordinary kriging weights were multiplied by the length of the sample and then renormalized to sum to one during estimation. Mineral resource blocks were estimated using a 3 by 3 by 2 discretization grid.

Mineralization at McMahon Ridge is believed to conform to structures within the Milltown Andesite with a minor amount of mineralization extending below into the under-lying Diamondfield (Sandstorm) formation. In general, these structures are silicified and locally referred to as ledges. The McMahon Ridge deposit is structurally controlled with an overall east-west strike but displays a distinctly sigmoid-shaped trend along strike, as shown in Figure 17-18. The overall strike length is approximately 1,524 m (5,000 ft) and dips 50° to 70° to the south. The high-grade zone forms several discontinuous bodies that appear to be structurally controlled ore shoots with the larger zones located where the local strike trends east-southeast (Figures 17-19 and 17-20). All variogram and search parameters for the entire model follow this east–southeast trend with a dip to the south.

Figure 17-18: Oblique View Showing the Sigmoid-Shape of the McMahon Ridge Low-Grade Domain

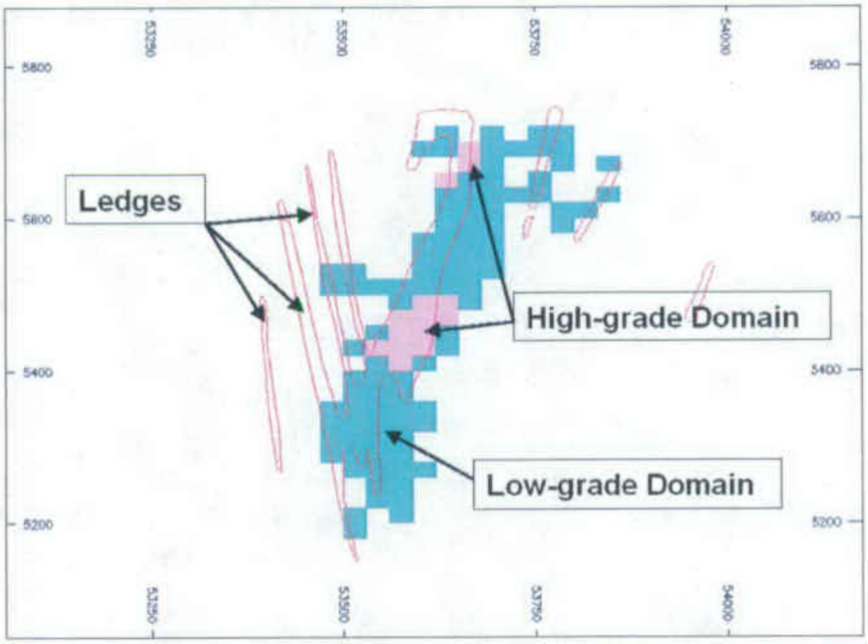


Note: Y is North, X is East and Z is up, No Scale

Figure 17-19: Oblique View of the McMahon Ridge High-grade Domain (magenta) within the Low-grade Domain as a Reference (green)

Note: Y is North, X is East and Z is up, No Scale.

Figure 17-20: South–North Cross Section of McMahon Ridge at 63650 East showing the Relationships between Domains and Ledges



17.16.3 McMahon Ridge Density Model

In previous models, the percent of ledge material, clay material, and underground workings were assigned to each sub-celled block using wireframes. These percentages were then weight proportioned by volume to assign the percentage of each material to the non-sub-celled parent blocks of the current model. All material remaining was classified as rock. These percentages were then used to weight proportion a density for each block, using densities of 14.2 cubic feet per short ton (ft^3/st) for rock, 13.19 ft^3/st for ledge, 15.82 ft^3/st for clay, and 0 ft^3/st for underground workings.

To assess whether the volume of the historical underground workings was large, the cross section outlines were extruded halfway to the next cross section to create three dimensional solids. The difference in ore tons was calculated and determined to be less than one percent.

17.16.4 McMahon Ridge Metallurgical Model

Recoveries were based on the recovery projections shown in Table 17-12. The recovery projections were based on the percentage of ledge in the model block and the rest of the block was considered andesite, including all clay material. Implementation of the projected recoveries into the block model was performed in three steps.

1) If the ledge percentage in the block model was greater than or equal to 90% the block was assigned the ¾" inch ledge recovery.

2) If the ledge percent in the model was greater than or equal to 10% and less than 90%, the model block was assigned the ¾" inch Ledge/Andesite recovery.

3) If the ledge percent was less than 10% the model block recovery was set to the ¾" inch andesite recovery.

The percentage of ledge for determining which recovery to assign to the model block was based on the percentages of each material allowed into the column recovery test. For example, andesite column tests contained up to 8.46% ledge material. Silver recoveries were not included since silver was not estimated.

Table 17-12: McMahon Ridge Recovery Projections

	2 inch Heap Leach (%)	¾ inch Heap Leach (%)	Milling (%)
Ledge			
Au	62.4	64.2	90.0
Ag	12.0	15.7	91.0
Ledge/Andesite			
Au	69.9	71.7	88.6
Ag	16.6	20.3	91.0
Andesite			
Au	65.3	77.1	71.0
Ag	35.0	38.7	76.0

17.17 AMEC Checks and Verification of McMahon Ridge Model

17.17.1 Visual Comparisons

Estimated block model gold grades were visually examined in cross section and level plan by comparing them with the composites in the drill holes. Three examples are shown in Figures 17-21 to 17-23. In general, the model appears to correspond to the drill hole composites relatively well. It should be noted that the high-grade domain accounts for five percent of the total tons and 21 percent of the total ounces in the model.

Figure 17-21: South–North Section — 63,200 East, Looking West

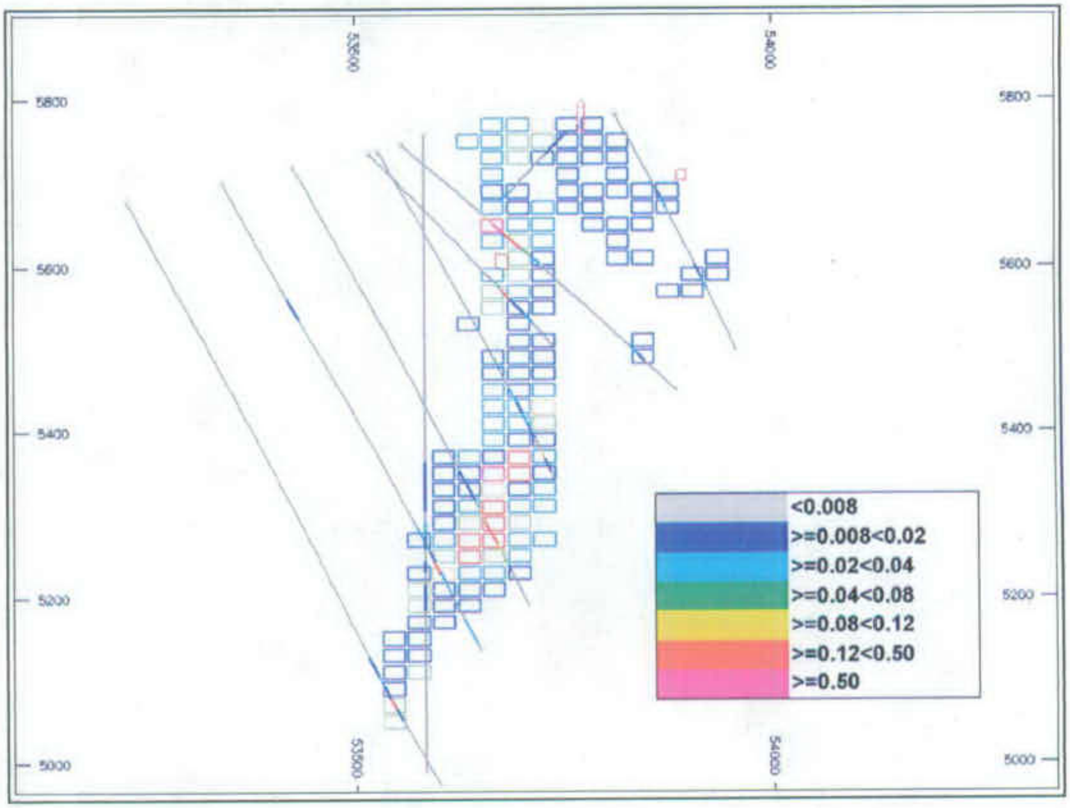
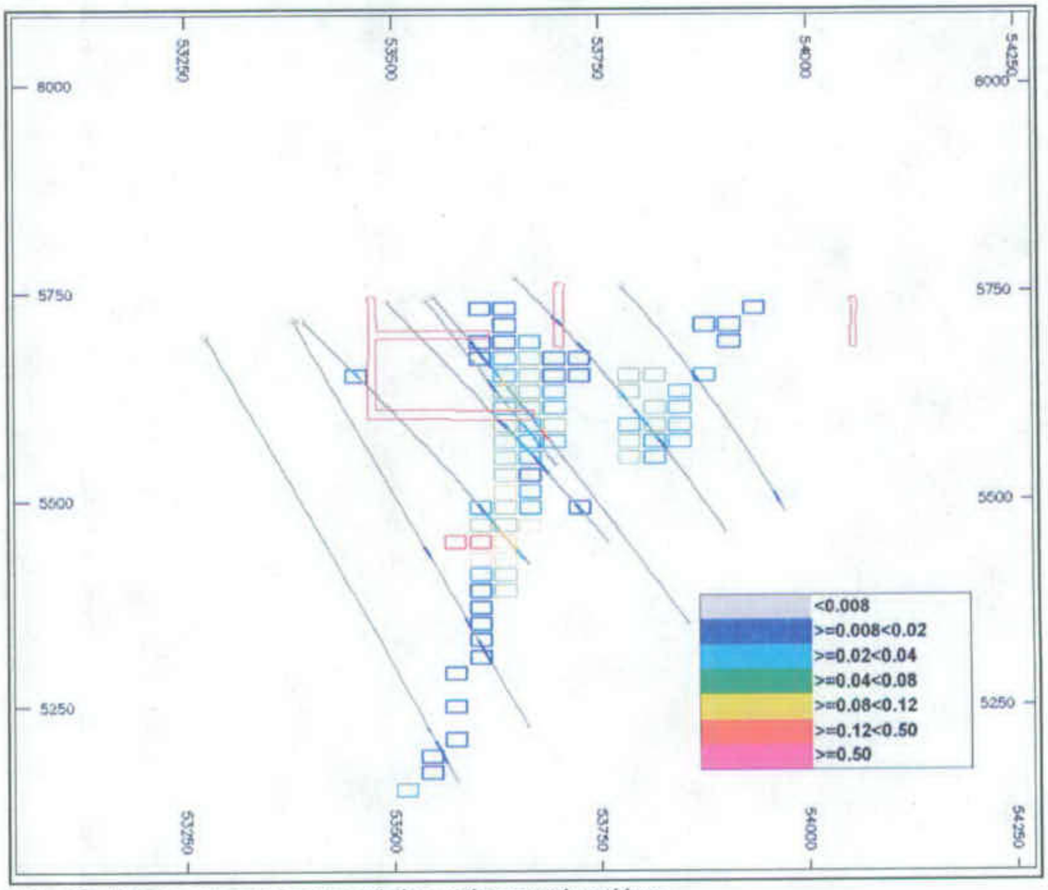
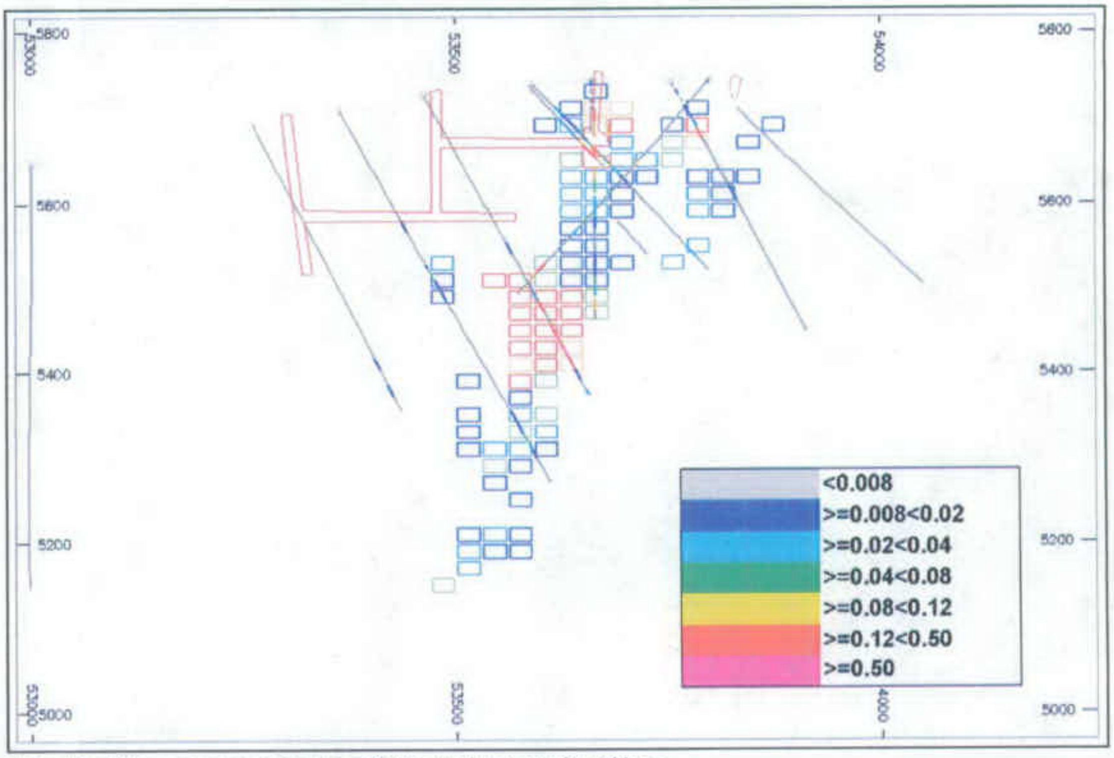


Figure 17-22: South–North Section – 63,500 East, Looking West



Note: Red lines represent known existing underground workings.

Figure 17-23: South–North Section – 63,600 East, Looking West



Note: Red lines represent known existing underground workings.

17.17.2 AMEC Analysis of Change-of-Support for McMahon Ridge Model

A preliminary check on the smoothness of the resource model was evaluated using the discrete Gaussian or Hermitian polynomial change-of-support method (Herco, the check is considered preliminary due to the small size of the high-grade domain which destabilizes the calculation of the block dispersion variance). This method calculates the distribution of block grades expected during mining given the size of the selective mining unit (SMU). Herco first creates the expected SMU distribution to be encountered during mining and then calculates tons and grade for that SMU that can be compared to tons and grade in the resource model over a series of cutoff grades. If the resource model has predicted the tons and grades adequately, the grade-tonnage curves for the expected SMU–sized blocks should match the resource model, and the resource model should be a good predictor of tons and grade during mining. If the curves diverge significantly, the smoothness of the resource model needs to be adjusted.

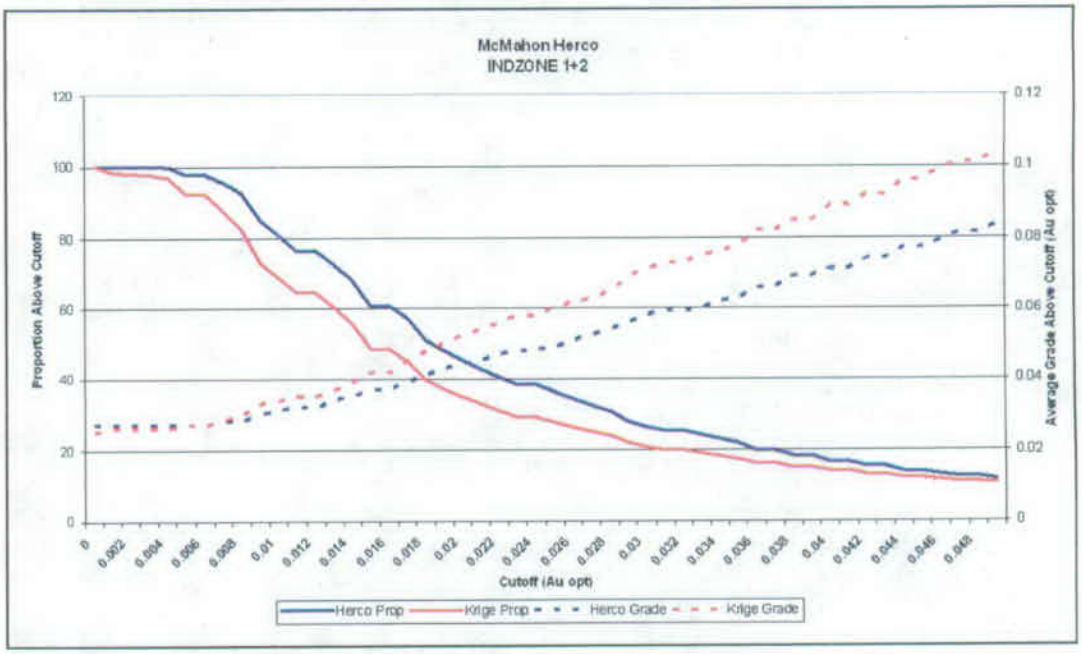
The change of support analysis requires a declustered composite file, the dimensions of the expected SMU and the variance of the expected SMU distribution. Declustering the composites was performed using a nearest neighbor model using all estimated blocks.

An assumed SMU size of 9.75 m by 9.75 m by 6.00 m (32 ft by 32 ft by 20 ft) was used, based on comparisons to active mines. The declustered composites distribution was then transformed into a distribution having the same mean as the declustered composites and the same variance of the expected SMU blocks. This change-of-support SMU model reflects the expected tons and grades to be encountered during mining and can be graphed against the kriged model to easily determine whether the kriged model is biased high or low at a given cutoff grade.

Grade and tons are plotted against cutoff for the low-grade domain, as shown in Figure 17-24. The distribution of tons and grades based upon the change-of-support model are shown with blue lines. The solid blue line is the tons and the dashed blue line is the average grade above a given cutoff grade. The red lines show the tons (solid red) and grade (dashed red) of the kriged block estimate.

Normally the curves of the Herco-corrected nearest neighbor and the kriged estimates are expected to be close to each other. In the McMahon Ridge zone the analyses suggests that the model is not smooth enough and will under predict tons by approximately 15% while overestimating grade by approximately 10%. Although the high-grade zone could not be evaluated since variogram analyses and variance reduction factor were unreliable due to the small number of samples, the change-of-support analyses was performed on the high-grade and low-grade domains combined.

Figure 17-24: McMahon Ridge Change of Support Evaluation



17.17.3 AMEC Check for Bias in McMahon Ridge Model

The block model was checked for global bias by comparing the average metal grades (with no cutoff) from the model (kriged grades) with means from nearest-neighbor estimates for Measured and Indicated blocks. The nearest-neighbor estimator produces a theoretically unbiased estimate of the average value when no cutoff grade is imposed and is a good basis for checking the performance of different estimation methods. Table 10-13 categorizes the bias by domains. Although the low-grade domain demonstrates a minimal bias, the 12.9% bias in the high-grade domain should be reviewed.

Table 17-13: Bias Checks Globally and by Domain

Domain	Kriged Au Grade	Nearest Neighbor Au Grade	Percent Difference
Global	0.027 opt	0.024 opt	11.3%
Low-Grade	0.022 opt	0.021 opt	4.2%
High-Grade	0.158opt	0.140 opt	12.9%

AMEC also checked for local trends in the grade estimates (swath checks). This was done by plotting the mean values from the nearest-neighbor estimate versus the kriged results for all blocks within the indicator envelopes in east–west, north–south and vertical swaths. Due to the low number of samples in the high-grade domain, the low-grade and high-grade domains were combined. In general, the kriged estimate appears to be consistently higher than the nearest neighbor estimate as shown in Figures 17-25 to 17-27. AMEC recommends that this global and local bias be studied in future models. The blue line is the grade of the kriged model, the red line is the grade of the nearest-neighbor model, and the green line is the relative ratio between the kriged and nearest neighbor model. The relative ratio is expected to be within limits of ± 5% which are shown by the dashed black lines (upper and lower control limits).

17.18 McMahon Ridge Mineral Resource Classification

AMEC has found that for precious metal resources, drill hole spacing should be close enough to estimate the grade and tonnage within ± 15% at 90% confidence on a quarterly basis to be classified as Measured and within ± 15% at 90% confidence on an annual basis to be classified as Indicated. AMEC ran simulations to determine the drill hole spacing that would provide these levels of confidence. To meet these requirements for the low-grade domain, a nominal 9 m by 9 m (30 ft by 30 ft) drill hole spacing is required for resources to be classified as Measured and a nominal 24 m by 24 m (80 ft by 80 ft) drill hole spacing is required for resources to be classified as Indicated.

All confidence limits were based on an assumed daily production rate of 5,500 tpd. In addition, Measured and Indicated resources were required to use at least three and two drill holes, respectively, in the estimation. Due to the small number of samples in the high-grade domain the confidence intervals were calculated for the entire deposit.

Implementation of this classification was performed by calculating the distances to the two nearest holes as summarized in Table 17-14. All blocks that were estimated within the indicator shells but did not meet the Measured or Indicated requirements were classified as Inferred. It is AMEC's opinion that this resources classification meets the standards established by the CIM as specified in NI–43101. In this study, all blocks that were estimated, regardless of their classification, were used in design of open pits.

Figure 17-25: North-South Swath Plots for the McMahon Ridge Model

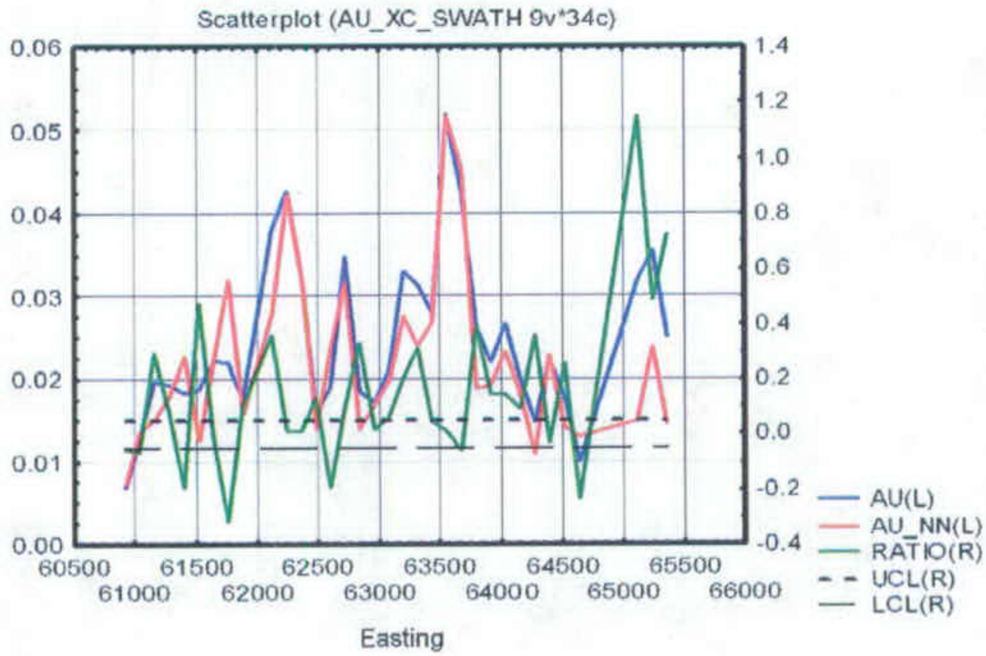


Figure 17-26: East–West Swath Plots for the McMahon Ridge Model

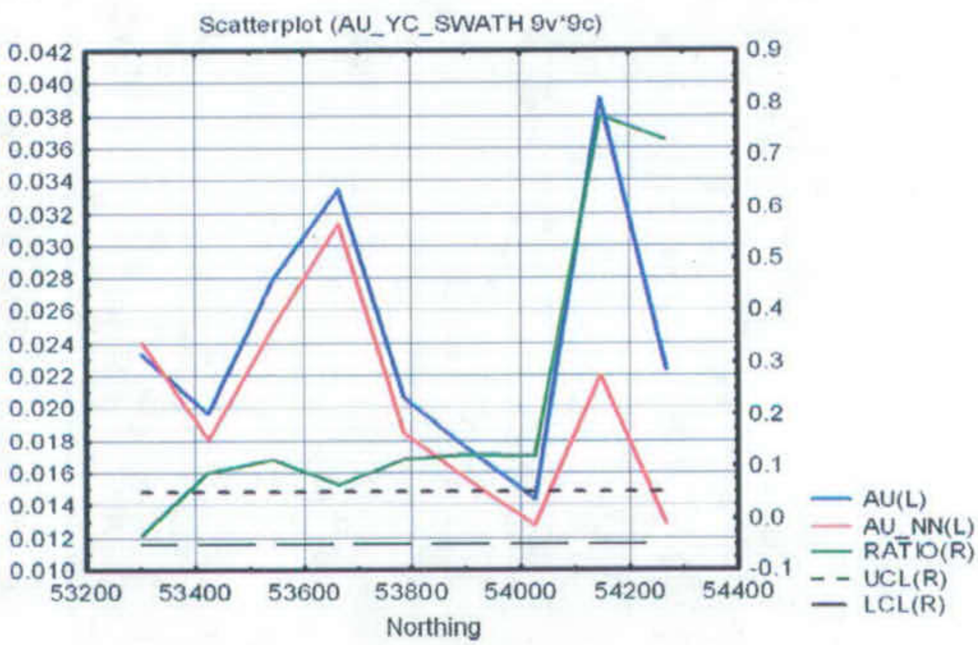


Figure 17-27: Vertical Swath Plots for the McMahon Ridge Model

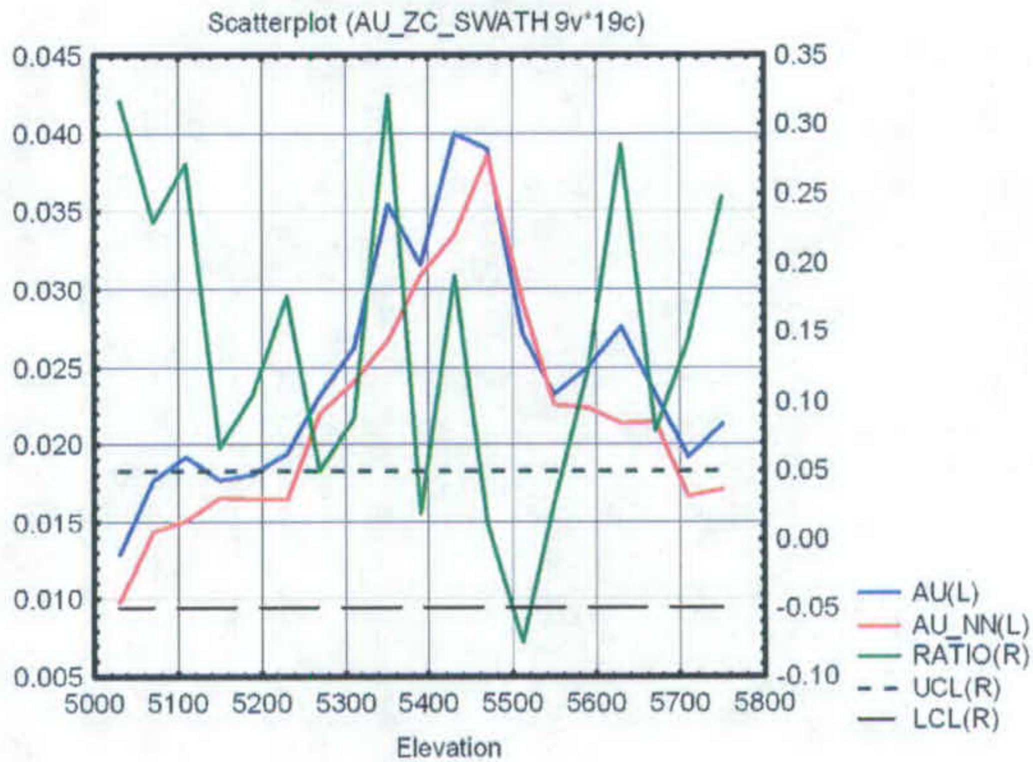


Table 17-14: Criteria for Implementation of Resource Classification for McMahon Ridge Model

	Distance to First Drill Hole	Distance to Second Drill Hole	Number of Drill Holes
Measured	<=23 feet	<=39 feet	>=3
Indicated	<=60 feet	<=104 feet	>=2

17.19 Resource Tabulation within Pits

Resources were defined by inclusion of Measured, Indicated and Inferred Resources within a Lerchs Grossmann pit shell using a gold price of US$500/oz, variable gold recoveries by metallurgical types and operating costs of $1.24/t ore mined, $0.98/t waste mined, $2.51/t ore processed, and $0.61/t G&A. Table 17-15 lists mineral resources in the Gemfield pit. Table 17-16 lists mineral resources in the McMahon Ridge pit.

Table 17-15: Resources Within Gemfield Pit Shell

Category	Ore Tons	Au Grade Oz/st	Contained Oz Au	Waste Tons	Strip Ratio
Measured	8,752,000	0.032	280,064		
Indicated	3,707,000	0.029	107,503		
Inferred	88,000	0.116	10,208		
Sub-Total	**12,546,000**	**0.031**	**397,775**	**21,888,000**	**1.74**

Notes: 1) Pit designs are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them such that these materials could be categorized as Mineral Reserves. There is no certainty that the preliminary pits will be realized. 2) Summation errors are due to rounding. 3) Public reporting of these resources must not combine Inferred Resources with Measured and Indicated Resources.

17.19.1 McMahon Ridge

Table 17-16: Resources Within McMahon Ridge Pit Shell

Category	Ore Tons	Au Grade Oz/st	Contained Oz Au	Waste Tons	Strip Ratio
Measured	733,000	0.049	35,917		
Indicated	3,405,000	0.041	139,605		
Inferred	172,000	0.038	6,536		
Sub-Total	**4,310,000**	**0.042**	**182,058**	**13,942,000**	**3.23**

Notes: 1) Pit designs are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them such that these materials could be categorized as Mineral Reserves. There is no certainty that the preliminary pits will be realized. 2) Summation errors are due to rounding. 3) Public reporting of these resources must not combine Inferred Resources with Measured and Indicated Resources.

17.20 Grade vs. Tonnage Curves

AMEC also defined a an more optimistic set of resources that would be contained within a pit designed using a $550/oz Au price and the same operating costs and recoveries as the base case. Grade vs. Tonnage curves for these resources are provided in Figures 17-28 and 17-29.

Figure 17-28: Gemfield Grade vs. Tonnage Curve

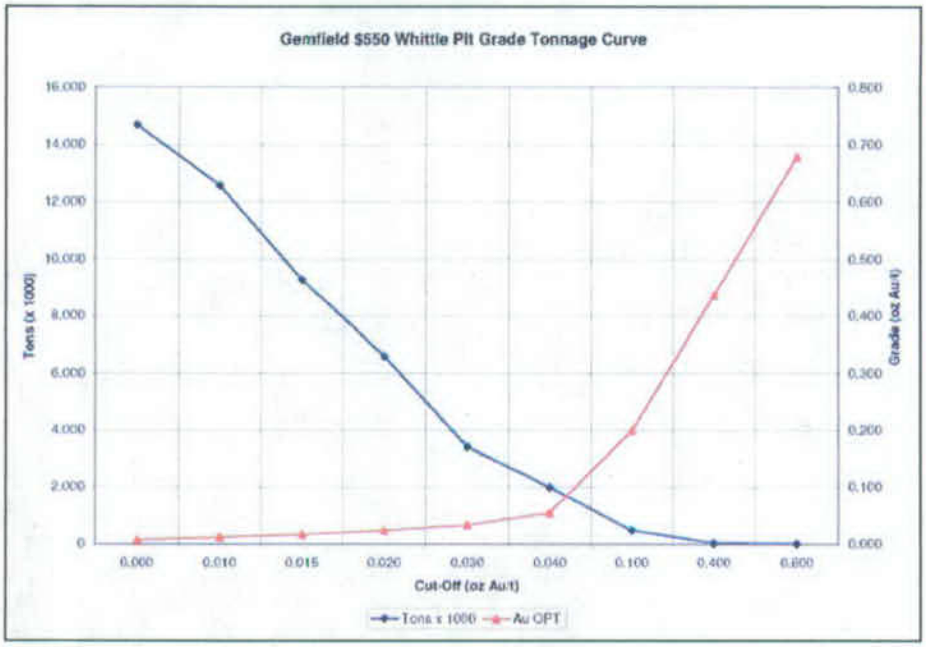
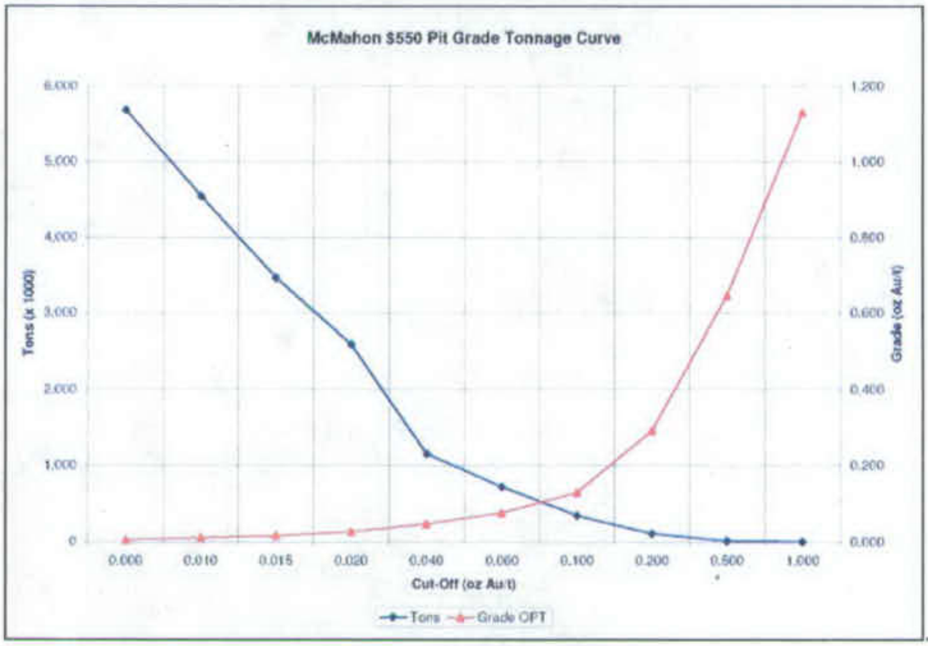


Figure 17-29: McMahon Ridge Grade vs. Tonnage Curve



17.21 Recommendations

AMEC recommends that:

- the compositing methodology should be based on the new indicator domains and not the historic domains based on lithology. AMEC also suggests that a shorter and consistent composite length be evaluated for future models, providing better definition to mineralized domains.

- the delineation between the high-grade and low-grade domains be re-evaluated so the highest grade composites are contained in the high-grade domain, and that future capping studies use a method that estimates the amount of metal at risk and the spatial relations of data available. AMEC also recommends that the capping studies be performed on the raw assays before compositing.

- The smoothness of both models be evaluated after the high-grade and low-grade domains have been better defined.

- The model should include estimates for silver.

- the 6.1% bias in the high-grade domain and the -6.3% bias in the low-grade domain at Gemfield should be reviewed.

- the 12.9% bias in the high-grade domain at McMahon Ridge should be reviewed.

AMEC believes that the high-grade domain is too restrictive at Gemfield, and could be expanded to include more of the higher-grade composites. This would also reduce the smearing of these high-grade samples in the low-grade domain.

Although setting the minimum number of samples to one is not an issue for McMahon Ridge, AMEC still recommends that a minimum number of samples used in the modeling parameters should be no lower than three.

18.0 OTHER RELEVANT DATA AND INFORMATION

18.1 Mining

18.1.1 Pit Optimization

Optimized pit shells were generated for the Gemfield and McMahon Ridge deposits using Whittle® pit optimization and scheduling software. Block model data generated by MVG and AMEC was imported in to a Gemcom® GEMS project for manipulation and export to Whittle model files.

Operating costs were based on mining 5,500 tpd ore (2,007,500 tpy) and heap leach processing of the ore. A conventional truck and shovel operation is envisioned, with a crusher and heap leach pad located south of the Gemfield pit in the vicinity of the historical facilities.

The optimization parameters are presented below.

- Metal gold price – $500/oz gold
- Mining cost – $1.24//t ore and $0.98/t waste (estimated by AMEC)
- Processing cost - $2.51/t processed (estimated by AMEC)
- General and administrative cost – $0.61/t processed (estimated by MVG)
- Slope angles – 45° (Preliminary Call & Nicholas geotechnical report)
- Production rate – 5,500 tpd
- Recovery – Variable per recovery models (based on silicification and sulfide matrix at Gemfield)
- Gemfield royalties – 5% NSR.based upon a gold price >$400/oz
- McMahon Ridge royalties – 2% to 7.5% NSR depending on claim location.

The production rate is relatively low, in comparison to most other operations in the central Nevada area. However, AMEC was able to obtain mine operating costs from a similar sized operation, with similar equipment, and factor the costs to suit the specific haulage requirements at Goldfield.

The Gemfield deposit falls on the GFE claims, and royalties are straightforward, at 5% NSR if the price of gold is greater than $400/oz.

The McMahon Ridge deposit royalties depend on the location of the pit relative to three sets of claims – the royalties and relative proportions within the pit are as shown in Table 18-1:

Table 18-1: McMahon Ridge Royalties

Claim	NSR	Proportion	Comment
Great Bend	2-5%	4%	Any portion with no existing production royalty burden
Daisy 123	2% – 7.5%	77%	Based on $20/ton recoverable value. Adjusted by 1% for each $10/ton increase in ore value to a maximum of 7.5%
Thanksgiving	0%	19%	Assumes that the Purchase Option is exercised at a cost of $29,500 (remaining payments)

State Highway 95 runs north–south across the west portion of the Gemfield deposit and will have to be relocated to allow open pit mining of the deposit. It is proposed that initial mining of the Gemfield deposit will be east of the highway, allowing time for the relocation to be completed before expansion into the final pit (Figure 18-1). Optimized pits were therefore generated for two cases – one with the highway in place, and a second with the highway relocated to the west, a deviation of some 2 miles (3.2 km). An offset of 46 m (150 ft) from the highway was used as the western limit for the first case, based on the preliminary geotechnical report prepared by Call & Nicholas. The initial pit (west of the highway) was subsequently treated as a separate phase in the scheduling of the Gemfield "ore", i.e. initial mining was restricted to the Phase 1 for most of the first two years of mining.

Gemfield metallurgical recoveries were based on a silicification/sulfide matrix developed from an analysis of available column and bottle roll metallurgical test work, and projections by AMEC. The planned Gemfield pit is shown in Figure 18-2.

Recoveries for the McMahon Ridge optimization were determined from a block model provided by MVG and modified by AMEC. The planned McMahon Ridge pit is shown in Figure 18-3.

Detailed pit designs were not developed.

Figure 18-1: General Goldfield Site Plan

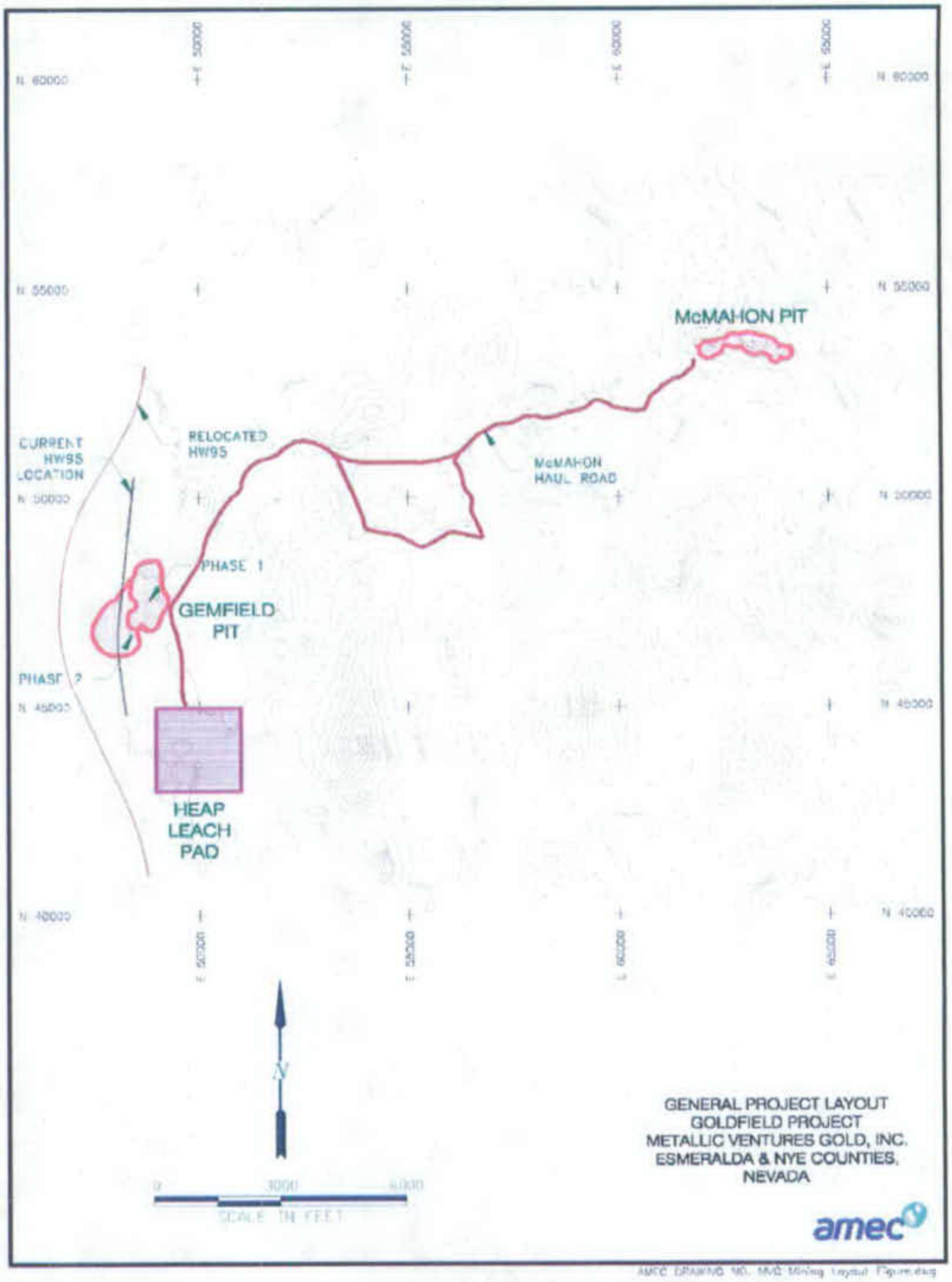


Figure 18-2: Gemfield Optimized Pit

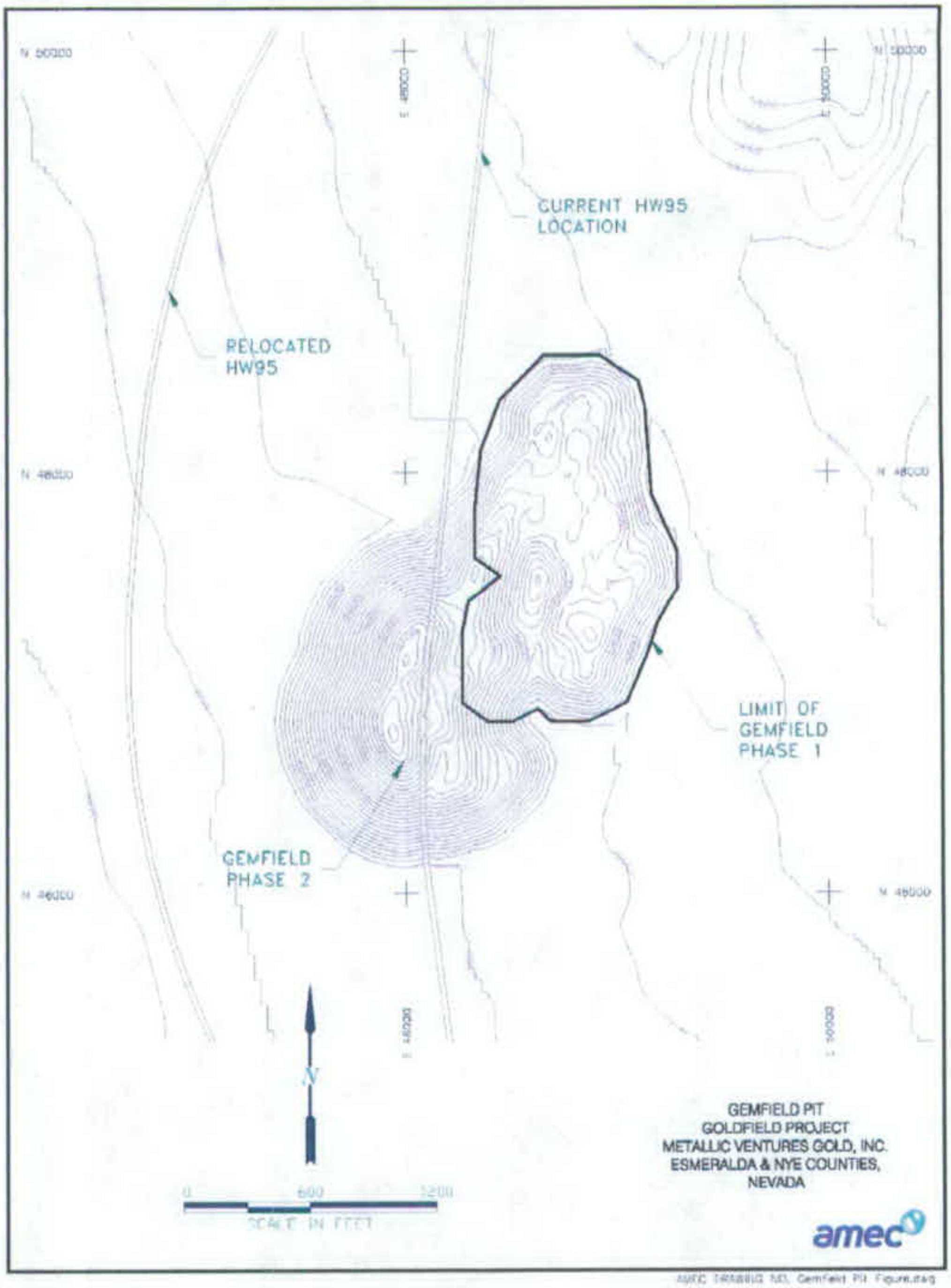
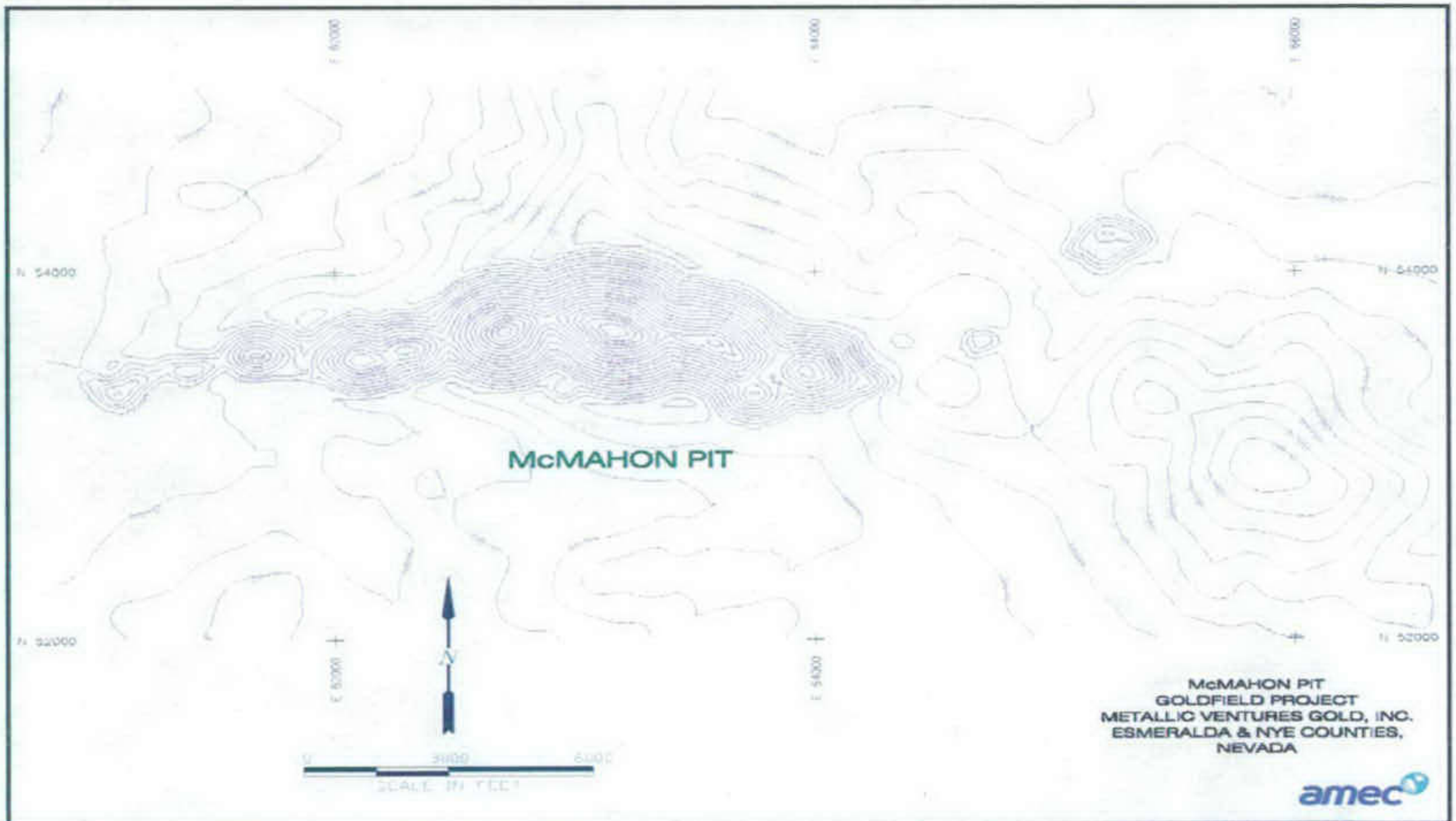


Figure 18-3: McMahon Ridge Optimized Pit



AMEC DRAWING NO. McMahon Pit Figure.dwg

18.1.2 Production Planning

Life of Mine (LOM) scheduling was performed with a Whittle scheduling application and a production rate of 5,500 tpd. The schedule is based on initial mining in Phase 1 of the Gemfield pit (east of Highway 95) over the first two years, followed by expansion into Phase 2 of the Gemfield pit after completion of the highway relocation. The McMahon Ridge pit is mined in the last three years of the schedule. The schedule assumes the location of the heap leach pad is in the vicinity of the historic facilities at the site, approximately 3,000 feet (914 m) south of the Gemfield pit, and with a flat haulage gradient. Waste dumps are proposed to be located to the north of the Gemfield pit and to the south of the McMahon Ridge pit. In addition, AMEC proposes that the Phase 1 Gemfield pit be backfilled to reduce waste haulage costs. Haulage of McMahon Ridge ore is approximately 6.7 km (4.2 miles), with a largely flat overall gradient.

The LOM production schedule is summarized in Table 18-2:

Table 18-2: LOM Production Schedule

Year	Ore Tonnage	Waste Tonnage	Strip Ratio	Au Grade (oz/st)	Recovered Au (oz)	Royalties US$
1	2,007,500	4,753,941	2.37	0.031	52,030	1,300,748
2	2,007,500	4,042,131	2.01	0.035	58,631	1,465,770
3	2,007,500	5,718,480	2.85	0.024	40,686	1,017,150
4	2,007,500	4,160,349	2.07	0.026	43,807	1,095,179
5	2,007,500	2,422,459	1.21	0.034	57,067	1,426,686
6	2,007,500	2,715,327	1.35	0.029	46,713	1,167,828
7	2,007,500	4,042,367	2.01	0.041	58,523	1,401,333
8	2,007,500	6,493,588	3.23	0.037	52,685	1,042,189
9	796,371	1,411,144	1.77	0.077	42,259	1,079,863
Total	**16,856,371**	**35,759,786**	**2.12**	**0.034**	**452,401**	**10,996,746**

A peak in the strip ratio is seen in Year 3, as Phase 2 of the Gemfield pit is commenced. It is likely that a more even stripping profile can be developed with the introduction of an additional pushback, provided that an adequate working width can be maintained. A similar stripping spike is seen in the final years of the schedule as the McMahon Ridge pit is mined. Again, the incorporation of additional pushbacks may allow this to be evened out.

18.1.3 Mining Equipment Selection

A standard truck and shovel operation is envisaged, with CAT 777 class trucks being loaded by CAT 992 class front end loaders. The leach pad location, is approximately 3,000 ft (about 900 m) south of the Gemfield pit, in the vicinity of the historic facilities.

Waste dumps would be designed on 50 ft high bench intervals with angle of repose dump faces, and a density of 20 ft^3/ton. End-dump methods would be used to place the waste rock with bench setbacks incorporated into each lift to produce an overall average slope of 18 degrees (3H/1V). The mine would operate three, eight hour shifts/day for 356 days/year, accounting for statutory holidays.

Based on established capacities for this type of equipment and the estimated haul distances, the estimated fleet requirements is listed in Table 18-3.

Table 18-3: Mining Equipment

Item	Year 1 Quantity	Year 2 Quantity
Production Equipment		
Trucks (CAT 777D)	2	1
Primary Loader (CAT 992G)	1	
Backup Loader (CAT 988)	1	
Blasthole Drill (Drilltec 245S)	1	1
Tracked Dozer (CAT D9)	1	
Tracked Dozer (CAT D8)	1	
Grader (CAT 16H)	1	
Grader (CAT 14H)	1	
Support Equipment		
Service Truck	1	
Lube Truck	1	
Blasting Truck	1	
Water Truck	1	
Pickups (4x4 F250)	5	
Fine Ore Haul Equipment		
Trucks (CAT 777D)	1	
Tracked Dozer (CAT D8)	1	
Pickups (4x4 F250)	1	

18.2 Recommendations

This preliminary assessment of scoping-level economics utilizes Inferred material within the pit shells. Additional drilling to increase confidence in the resources in-pit is warranted, prior to undertaking more in-depth studies.

Evaluation of different gold prices on pit shells is recommended.

Further evaluations are needed for the Gemfield and McMahon Ridge pits, to even out the stripping profile. Evening-out could be achieved with the introduction of additional pushbacks, provided that adequate working widths can be maintained in the pits.

AMEC notes that condemnation drilling will be required to be conducted in advance of the proposed highway relocation project, which may be necessary to provide clearance for open pit mining of the Gemfield deposit.

18.3 Operating Cost Estimates

18.3.1 Mining Operating Costs

Mining operating costs are estimated to be $1.24/t ore and $0.98/t waste.

Mine operating costs were developed from known costs for a nearby mining operation of similar size and with similar mining equipment. Drilling and blasting costs were assumed to be identical. Haulage costs were reduced to account for the shorter, flatter, haulage profiles.

18.3.2 Processing Operating Costs

Summary

Process operating costs were developed from first principles because analogous heap leach operations of this scale were not readily available. Operating cost estimate for the process plant facilities are constructed by cost center and by component. The five cost centers are reagents and consumables, electrical power, operating labor and supervision, plant operations supplies, plant maintenance supplies and consumables (including allowances for the operation of plant operating mobile and maintenance equipment). Not included in these operating costs are all costs associated with the mine operations, general and administrative costs, escalation, and any sustaining capital. No contingency has been applied to the operating costs. All costs are estimated in constant third-quarter 2006 US dollars.

Average operating expenditures for the process plant facilities are estimated to be $5.029 million per year or $2.51 per ton of heap leach feed (based on an annual heap leach feed rate of 2,000,000 tons per year). The breakdown of the process facility operating costs by major cost center is shown in Table 18-4.

Table 18-4: Summary of Plant Facility Operating Costs

Plant Cost Area	Annual Cost ($/yr)	Unit Cost ($/t heap ore)
Reagents and Consumables	1,279,000	0.64
Labor	2,049,000	1.02
Electrical Power	1,201,000	0.60
Plant Operating Supplies [1]	300,000	0.15
Maintenance Supplies	200,000	0.10
Total	**5,029,000**	**2.51**

Notes: [1] Operating supplies allow for general plant supplies, laboratory supplies and plant mobile equipment operations and maintenance

Basis of Estimate

The components and basis for each of the process facility cost areas are detailed below.

Reagents and Consumables

Crusher Liners

Estimated crusher liner consumption rates and budget costs are based on an estimated consumption rates per unit ore feed from a similar operation and in-house cost data.

Reagents and Chemicals

For the major reagent and chemical consumables, consumption rates were estimated from metallurgical test work, or estimated based on experience with similar unit operations. Unit costs are based on estimates from previous Nevada based studies and operations.

Labor

The total estimated workforce specific to the process plant facilities is estimated to be 30 employees, comprised of supervisory, operating, laboratory and maintenance personnel. The staffing plan by area is shown in Table 18-5.

Table 18-5: Staffing Plan

Labor Component	# of Personnel
General and administrative staff	0
Metallurgist / Mill Superintendent	1
Plant operations	16
Laboratory supervision and operations personnel	6
Maintenance	7
Total Process Plant Workforce	30

Wages and salaries were based on estimates from previous Nevada-based studies and operations, and are the prevailing burdened wage rates in the area.

Power

A unit power rate of $0.090 per kilowatt-hour was specified for the scoping study, as provided by MVG and Sierra Pacific Power Company.

A preliminary load list was developed from the conceptual process plant facility design, including all service loads, lighting, HVAC, buildings, and miscellaneous loads. Power draws for each motor on the plant site are estimated on the combined installed motor horsepower (excluding installed spares) and specific power draw and operating time factors determined by the motor service. The power requirements by area are shown in Table 18-6.

Table 18-6: Power Requirements

Area Description	Connected Load (kW)	Operating Load (kW)
Crushing	1,079	287
Heap Leach Solution Management	1,975	685
Carbon-in-Columns	148	29
Carbon Treatment Circuit	386	134
Reagents and Utilities	579	103
Facilities	480	286
Total Power Requirement	4,647	1,524

Plant Operating Supplies

Operating and maintenance supplies are estimated on the basis of industry averages. The maintenance supplies allowance is approximately 3.7 percent of the mechanical equipment capital costs for the facility. Operating supplies allow for general plant supplies and plant mobile equipment operations and maintenance. The operating supply annual cost for plant assay supplies and laboratory supplies is estimated at $300,000. The annual expenditure for operating and maintaining the mobile equipment fleet is estimated at $200,000.

Freight

The operating consumables estimates provided in the previous North American based studies were estimated based on purchase FOB the process facility. The freight estimates for all consumables are included in the consumable unit price.

Inflation

Operating cost estimates include no allowance for inflation.

Taxes

No taxes have been included in the purchase of all consumables.

Contingency

No contingency has been applied to the operating costs. It is expected that the financial sensitivity analysis for the operating costs will accommodate any reasonable eventuality expected during actual operation.

Exclusions

The following are not included in this operating cost estimate:

- Ongoing or sustaining capital (including reclamation)
- Inflation or escalation over the life of operations.

18.3.3 General and Administrative Operating Costs

General and administrative operating cost estimates were provided by MVG, and are summarized in Table 18-7.

Table 18-7: General and Administrative Operating Cost Estimate

Cost Area	Annual Cost ($/yr)	Unit Cost ($/t heap ore)
Office Administration		
Payroll	681,674	0.340
General Contract Services	10,000	0.005
General Services and Fees	149,080	0.074
Land Holding		
General Contract Services	0	0.000
General Services and Fees	381,398	0.190
Total	**1,222,152**	**0.609**

18.4 Permitting and environmental

18.4.1 Permits

MVG has two active Notices of Intent ("NOI") filed with the BLM enabling it to conduct exploration activities (Battle Mountain District, Tonopah field office). One NOI is located in the area of the Tom Keane mine (East Goldfield) and the other in the area of the Adams pit. The reclamation requirements under both NOIs have been essentially completed and MVG is currently awaiting re-vegetation.

A Plan of Operations ("POO") has been filed for the Gemfield area, and is covered by the Environmental Assessment ("EA") completed by the BLM (Battle Mountain District, Tonopah field office). The POO will allow MVG to continue with exploration activities in and around the Gemfield deposit, particularly to the west. This area is highly prospective for additional gold deposits, which may be similar in character to Gemfield. This is also the area in which considerable condemnation drilling will be conducted in advance of the proposed highway relocation project, which may be necessary to provide clearance for open pit mining of the Gemfield deposit.

18.4.2 Environmental

A large portion of the Goldfield Main area, the portion of the property that has seen most of the production activities, including recent heap leach activities, was purchased from Decommissioning Services LLC ("DSL") of Reno. DSL is responsible for fulfilling the obligations of its reclamation plan filed with the State and BLM by reclaiming certain areas disturbed by previous mining operations on these lands.

19.0 INTERPRETATION AND CONCLUSIONS

19.1 Resource Estimates

MVG estimated gold resources in the Gemfield and McMahon Ridge deposits from three-dimensional geostatistical block models that were generated using the commercially available mining software Vulcan® with supplementary variographic analysis using Isatis®.

In order to evaluate heap leaching, milling, or combined processing options, two PACK models were generated for both deposits. The first PACK model (INDZONE 1) was designed for low-grade material suitable for a heap leach operation. The second PACK model (INDZONE 2) was designed to outline higher-grade material that could support a mill process. The two domains in the models allowed different economics and recoveries to be applied to each domain, thus providing the basis for mine and process designs. Although silver assays exist and were modeled previously, only gold was estimated in this study.

Analysis of mill-grade resource tonnages revealed that these materials were not sufficient to warrant construction of a mill or toll milling. As a result, the operation was designed as a heap leach mine.

AMEC's check of the Gemfield resource estimate indicates the presence of local biases in both the low and high-grade domains. The low-grade domain demonstrates a minimal bias, but the high-grade domain shows a +6.1% grade bias. This bias should be mitigated in future models to provide better local estimates of grades in the high-grade domain.

AMEC's check of the McMahon Ridge model shows a minimal grade bias in the low-grade domain, but a +12.9% grade bias in the high-grade domain. The bias in the high grade domain should be removed in subsequent resource estimates.

Resources were classified using a risk-based approach to confidence limits, combined with criteria of sample and drill hole support. Resource classifications meet the standards and definitions of the CIM in accordance with the requirements of NI 43-101.

Resource estimates are suitable for this level of study.

19.2 Metallurgical Recoveries and Process Designs

Gemfield ores exhibit projected heap-leach recoveries of from 65 to 94% for oxide mineralization, depending on the intensity of oxidation and silicification. McMahon

Ridge ores show projected heap-leach recoveries of from 64 to 77% depending on if the material is ledge or andesite.

AMEC developed a preliminary process design based on the test work results and conceptual design criteria. The main process areas for the proposed Gemfield and McMahon Ridge project are:

- Crushing
- Dump truck stacking
- Heap leaching
- Carbon-in-column gold and silver recovery
- Carbon treatment circuit (acid wash/strip/regeneration)
- Precious metal electrowinning and smelting
- Utilities.

19.3 Mine Designs and Production Plan

AMEC developed optimized pit shells for the Gemfield and McMahon Ridge deposits using Whittle® pit optimization and scheduling software. Block model data generated by MVG and AMEC was imported in to a Gemcom® GEMS project for manipulation and export to Whittle model files.

Operating costs were based on mining 5,500 tpd ore (2,007,500 tpy) and heap leach processing of the ore. A conventional truck and shovel operation is envisioned, with a crusher and heap leach pad located south of the Gemfield pit in the vicinity of the historical facilities. The production rate is relatively low, in comparison to most other operations in the central Nevada area. However, AMEC was able to obtain mine operating costs from a similar sized operation, with similar equipment, and factor the costs to suit the specific haulage requirements at Goldfield.

Life of Mine (LOM) scheduling was performed with a Whittle scheduling application and a production rate of 5,500 tpd. The schedule is based on initial mining in Phase 1 of the Gemfield pit (east of Highway 95) over the first two years, followed by expansion into Phase 2 of the Gemfield pit after completion of the highway relocation. The McMahon Ridge pit is mined in the last three years of the schedule. The schedule assumes the location of the heap leach pad is in the vicinity of the historic facilities at the site, approximately 3,000 feet (914 m) south of the Gemfield pit, and with a flat haulage gradient. Waste dumps are proposed to be located to the north of the Gemfield pit and to the south of the McMahon Ridge pit. In addition, AMEC proposes that the Phase 1 Gemfield pit be backfilled to reduce waste haulage costs. Haulage of McMahon Ridge ore is approximately 6.7 km (4.2 miles), with a largely flat overall gradient. The resulting production plan calls for mining of 16.9 Mt of ore and 35.9 Mt of waste (for a strip ratio of 2.12:1 waste:ore) over a nine-year mine life. Average ore grade is 0.034 oz/t Au, with an estimated total of 452,000 ounces of recovered Au.

20.0 RECOMMENDATIONS

20.1 Drilling Recommendations

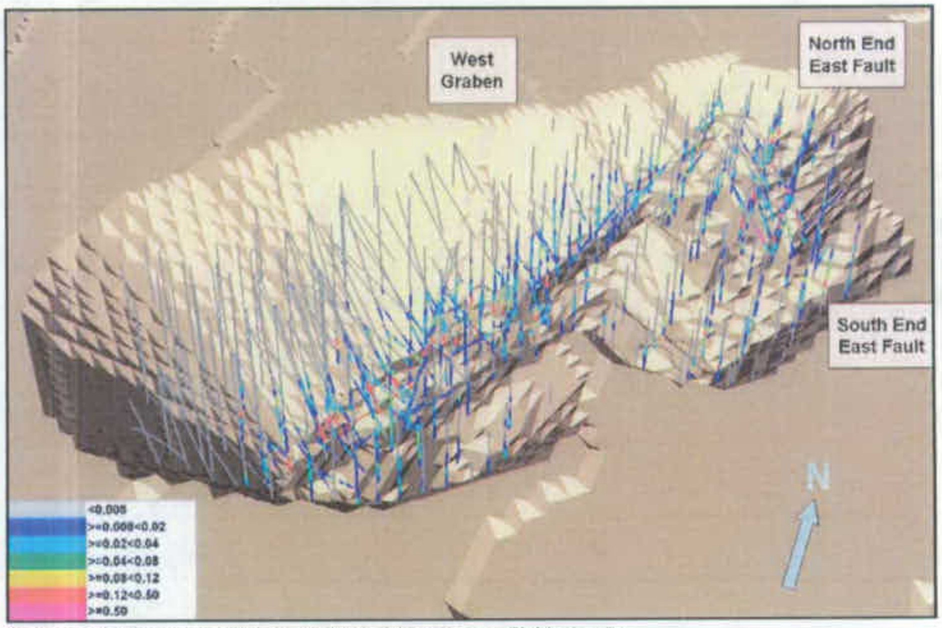
The existing drill hole database was reviewed for recommendations for additional drilling requirements for bringing the properties into production. Drill hole requirements were reviewed in conjunction with MVG geologist Robert Bennett. For discussion, drill requirements were grouped into the following categories: exploration, pit definition, metallurgical, geotechnical and condemnation.

20.2 Gemfield Exploration

In general, the Gemfield deposit is well defined by drilling and ore zones delineated by the resource model that lie outside of the pit appear to be well constrained. Four areas, however, were noted where additional drilling may add additional resources as follows (Figures 20-1 through 20-3):

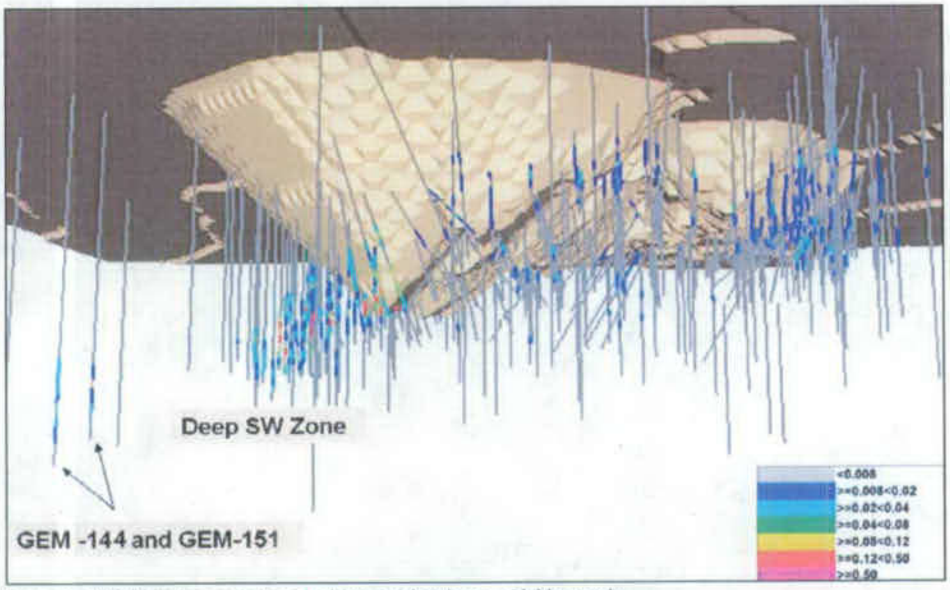
- East side of the north end of the east fault
- East side of the south end of the east fault
- Deep SW zone
- Area around GEM-144 and GEM-151.

Figure 20-1: Gemfield $500 Au Optimized Pit (looking N-NW from above topography)



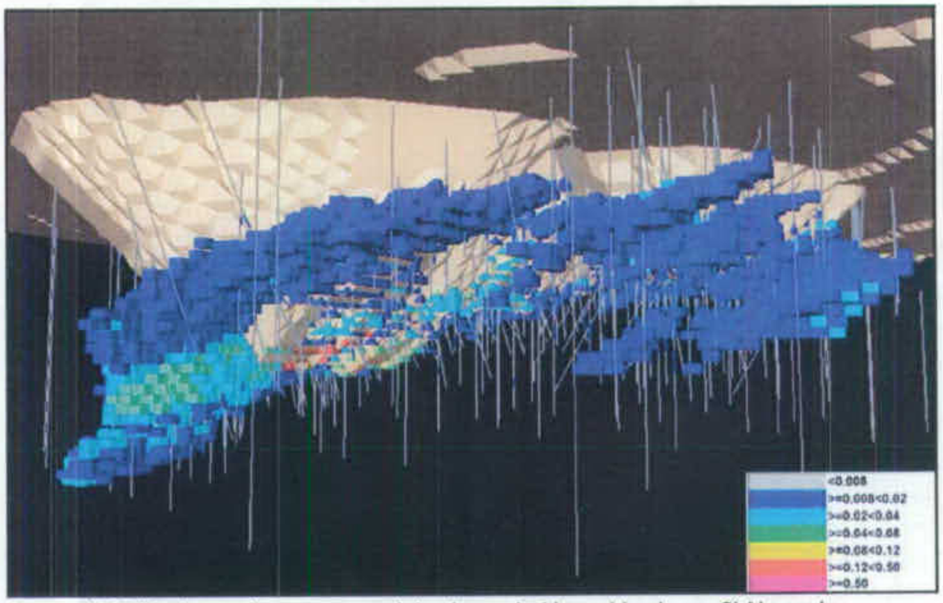
Notes: 1) Drill holes color coded by gold values. 2) No scale.

Figure 20-2: Gemfield $500 Au Optimized Pit (looking N-NW from below topography)



Notes: 1) Drill holes color coded by gold values. 2) No scale.

Figure 20-3: Gemfield $500 Au Optimized Pit with Resource Model (looking N-NW from below topography)



Notes: 1) Drill holes and resource model color coded by gold values. 2) No scale.

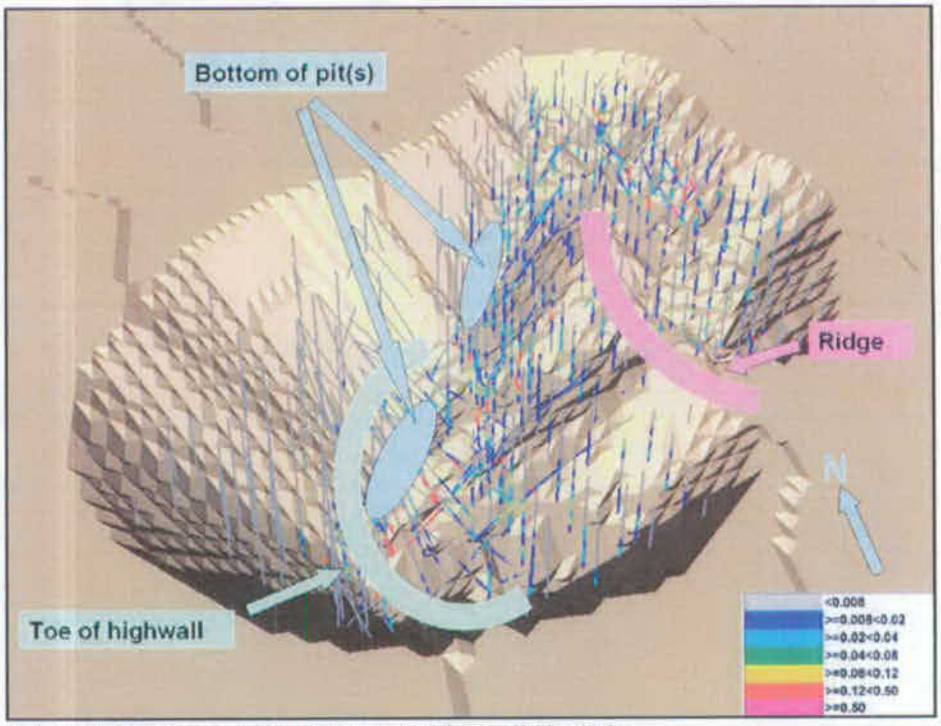
The east fault strikes north-south and dips 45 degrees to the east. It is located along the east side of the northern half of the deposit and follows the edge of the LG resource shell. The fault is considered post mineral since it cuts-off the higher-grade mineralization located in the north-east end of the resource pit. Fourteen drill holes on the east side of the fault directly across from the higher-grade mineralization were drilled to explore for a potential extension of the higher-grade mineralization. Additional drilling should test whether the extension has been offset and shallow enough to be economic.

The west graben fault has a few drill holes around its southern end with sporadic economic mineralization but no drill holes have tested the northern end. Adding additional ounces to the resource model will be difficult since they will be covered by 400 feet of alluvium. Both the deep SW zone and the area around GEM-144 and GEM-151 have untested areas where additional drilling may add ounces. The mineralization, however, lies 680 feet below the surface and would have to be expanded significantly for the zone to become economic. In general, exploration should be prioritized to the east of the deposit where alluvium is not as deep as the west side.

20.3 Gemfield Pit Definition

Areas of the pit where small changes in pit design have a significant impact on economics were reviewed for drill hole coverage. Three main areas of concern are the bottom of the pits, the toe of the highwall, ridges within the pit and high-grade zones that might trend into the highwall (Figure 20-4):

Figure 20-4: Gemfield $500 Au Optimized Pit with Possible Drill Targets (looking N-NE from above topography)



Notes: 1) Drill holes color coded by gold values. 2) No scale.

20.3.1 Toe of the Highwall

The location of the toe of the highwall dictates the final location of the highwalls and is very critical. For example, the south and west sides of the Gemfield pit are approximately 2,500 feet in length with a slope distance of 800 feet (550 feet high). Changing the location of the footwall by 30 feet (width of a single resource block) will cost approximately $4 MM in mining at one dollar per ton mining cost. In order to optimize the highwall placement, AMEC first recommends that the quality of the drill holes defining the toe wall be checked for down-hole surveys and QAQC. The exact placement of the final highwall should then be reviewed using the original geologic data independent of the resource model. Since the drill hole data is on 100 foot centers, generating the optimal placement of the toe between the 100 foot spaced drill holes may require additional drilling.

20.3.2 Bottom of Pit

AMEC recommends that the bottom of the pits be delineated by no less than two drill holes. The bottom of the Gemfield pit was inspected and was found to have sufficient support to define the bottom of the pits.

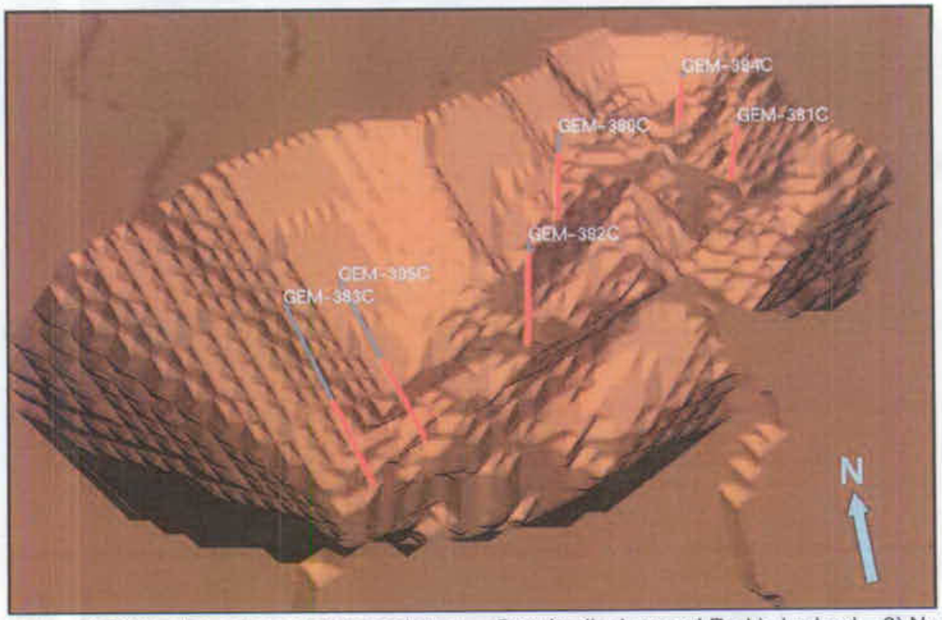
20.3.3 Ridges and Buttresses Within the Pit

A prominent ridge north-south trending ridge divides the pit and forms a buttress on the southern end where it meets the highwall. This ridge will decrease the efficiency at which the pit can be mined and the buttress will generate geotechnical problems. The ridge is adequately drilled and appears to be a natural waste zone. Although additional drilling will probably not remove this ridge, sensitivity studies in modeling, recovery and/or economics should be performed to determine if the ridge can be removed. Mining this material at a break-even cost may provide benefits in mining efficiency and overall economic viability.

20.4 Gemfield Metallurgical

Metallurgical studies are highly dependent on how representative the samples are that were used for testing. Figure 20-5 shows the location of the six PQ core holes that were used for column tests. These drill holes do not fully cover the mineralization types within the deposit. Additional drill holes will be required to collect additional material for additional column test that should be run for at least 120 days. The number and location of additional drill holes need additional studies.

Figure 20-5: Gemfield $500 Au Optimized Pit with Drill Holes Used to Collect Samples for Column Tests (looking N-NW from above topography)

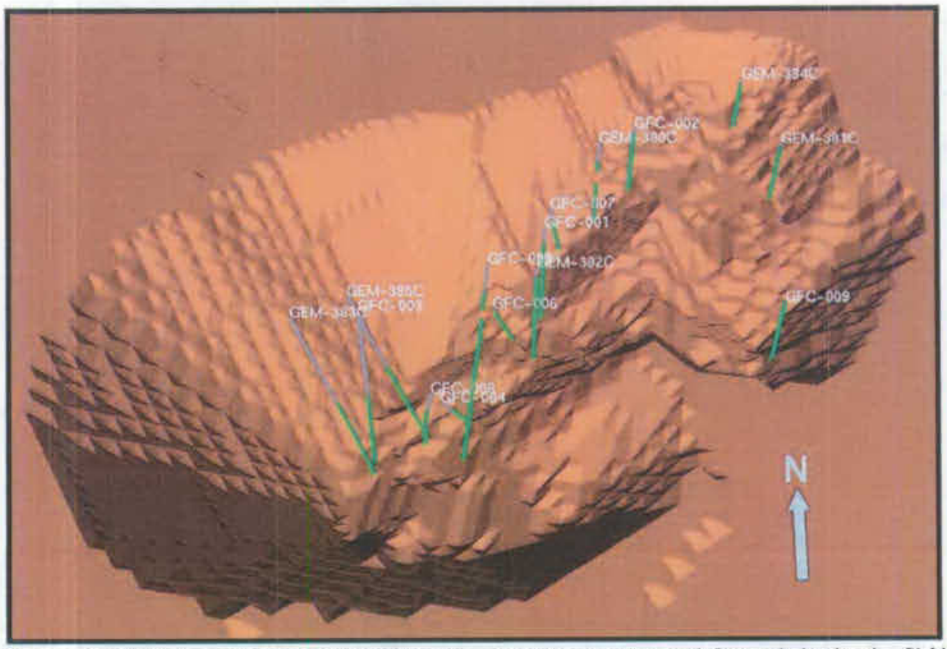


Notes: 1) Drill holes color coded by rock type – Gray is alluvium and Red is bedrock. 2) No scale.

20.5 Gemfield Geotechnical

Core holes for geotechnical data include the six holes for metallurgical samples plus an additional nine core holes where geotechnical data was recorded. The problem is that none of the holes are in the highwall where the data is the most critical Figure 15-6.

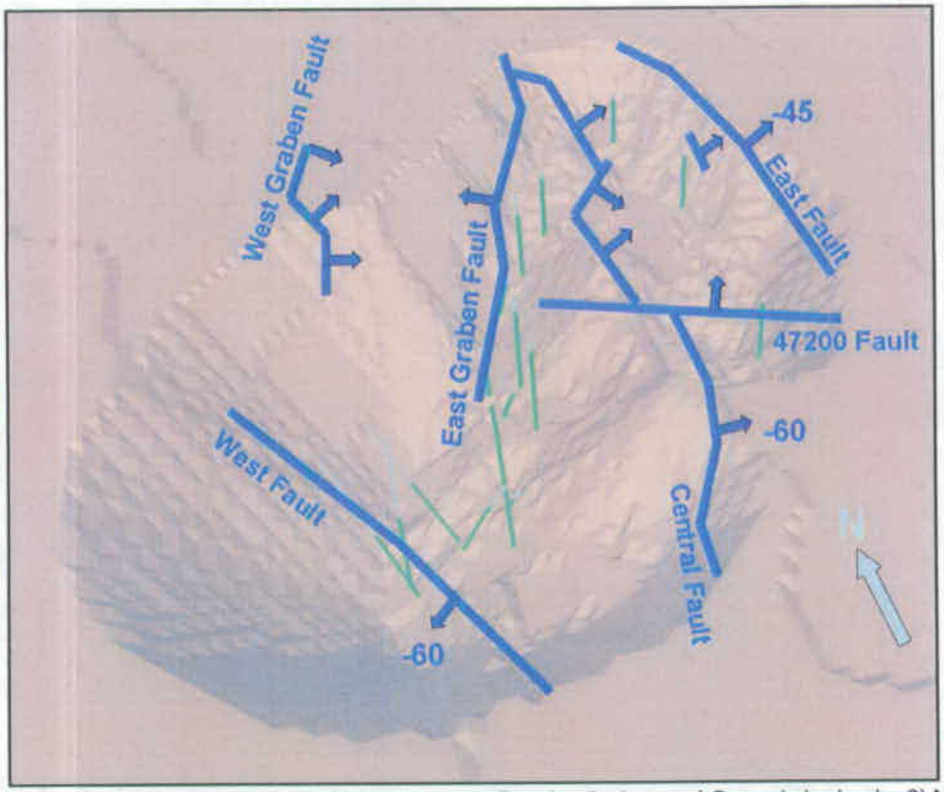
Figure 20-6: Gemfield $500 Au Optimized Pit Showing Core Holes with Geotechnical Data (looking N-NW from above topography)



Notes: 1) Drill holes color coded by rock type – Gray is alluvium and Green is bedrock. 2) No scale.

Additional geotechnical drilling should be performed to determine if any major structures parallel and toe-out in the highwall. As a first pass, the known major structures were superimposed on the $500 Lerchs-Grossmann pit for review (Figure 20-7).

Figure 20-7: Gemfield $500 Au Optimized Pit Showing Core Holes with Geotechnical Data and Surface Expression of Known Faults (looking N-NE from above topography)



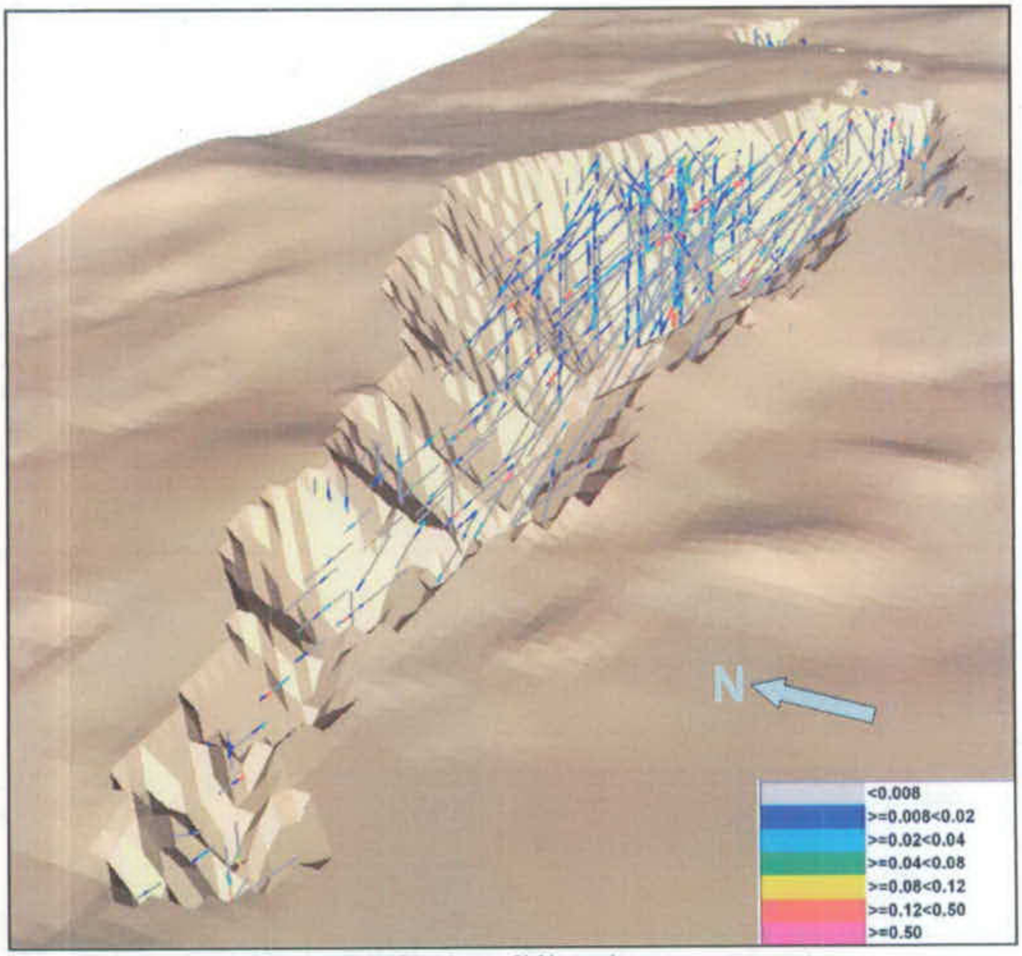
Notes: 1) Drill holes color coded by rock type – Gray is alluvium and Green is bedrock. 2) No scale.

Most of the faults appear to dip into the highwall or dip more steeply than the highwall except for the west graben fault which may require additional drilling. Geotechnical drilling should be conducted in two phases. The first phase would be the starter pit which will probably require a geotechnical study due to its proximity to the existing highway. The second phase will use all the geotechnical data generated from the starter pit to evaluate the final pit design. Drill requirements for each phase will depend on the recommendations of the geotechnical engineer reviewing the data.

20.6 McMahon Ridge Exploration

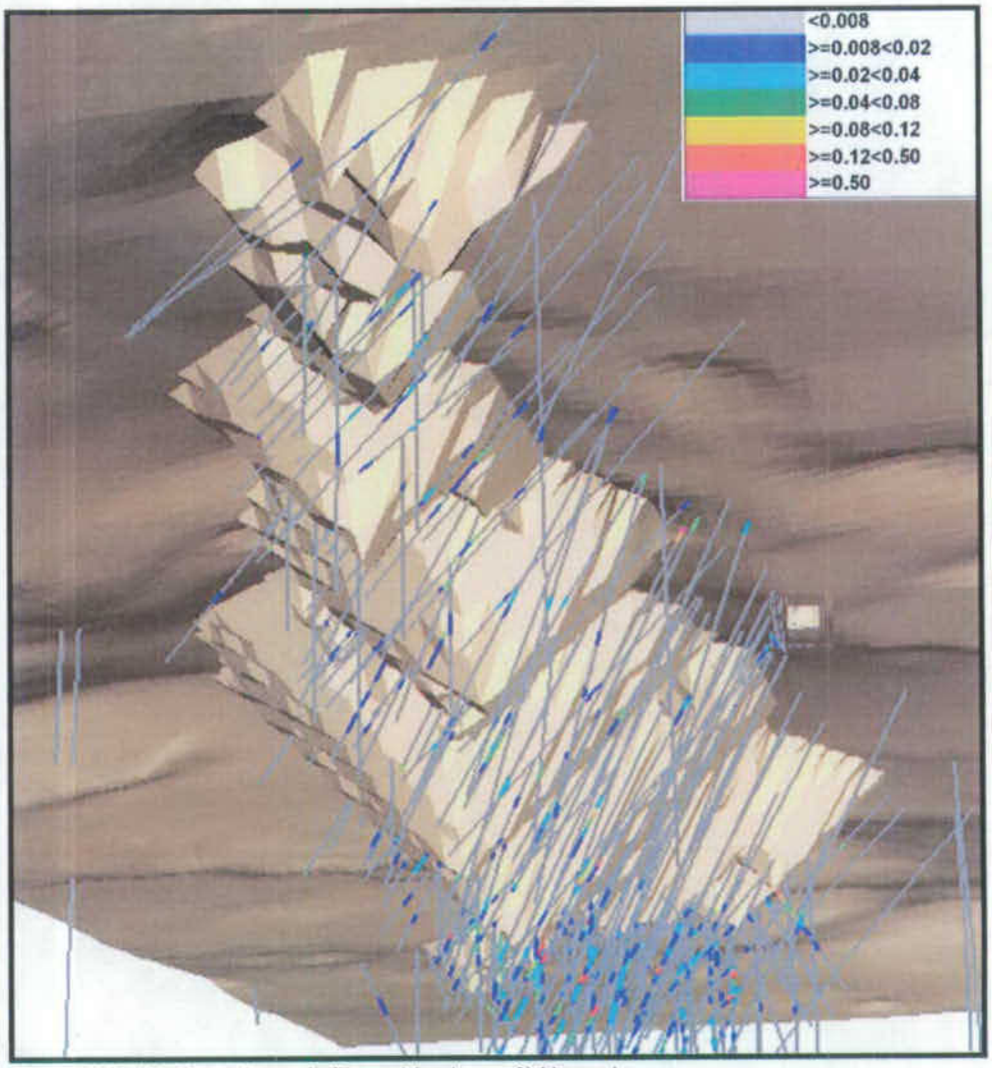
In general, the McMahon Ridge deposit is well defined by drilling including ore zones that lie outside of the pit (Figures 20-8 and 20-9). Any addition mineralization discovered would most likely be a separate pit.

Figure 20-8: McMahon Ridge $500 Au Optimized Pit (looking E-NE from above topography)



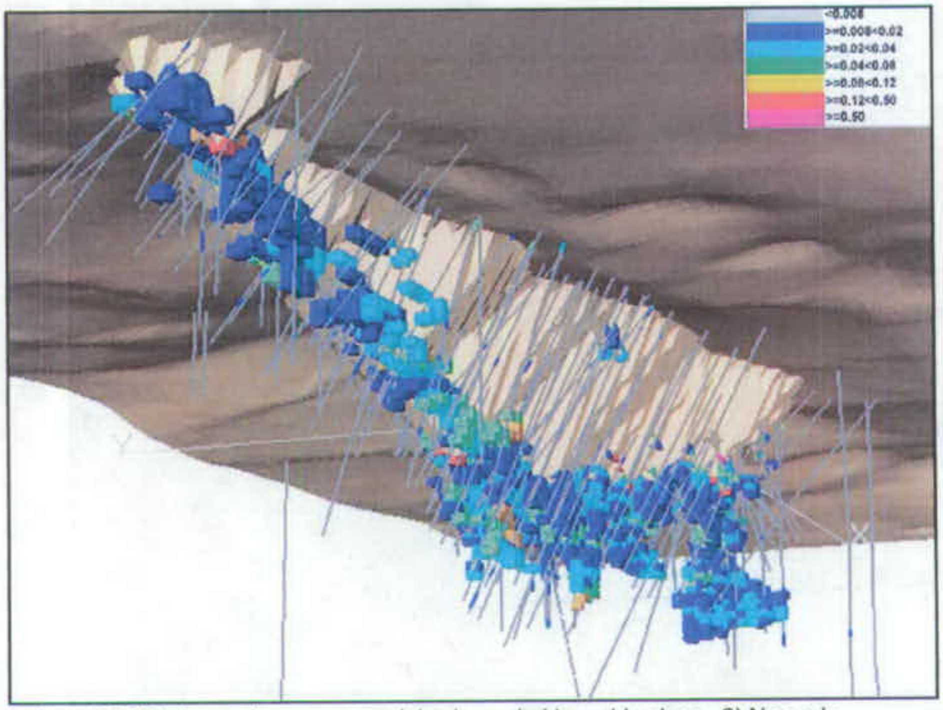
Notes: 1) Drill holes color coded by gold values. 2) No scale.

Figure 20-9: McMahon Ridge $500 Au Optimized Pit (looking E-NE from below topography)



Notes: 1) Drill holes color coded by gold values. 2) No scale.

Figure 20-10: McMahon Ridge $500 Au Optimized Pit with Resource Model (looking E-NE from below topography)



Notes: 1) Drill holes and resource model color coded by gold values. 2) No scale.

McMahon Ridge Pit Definition

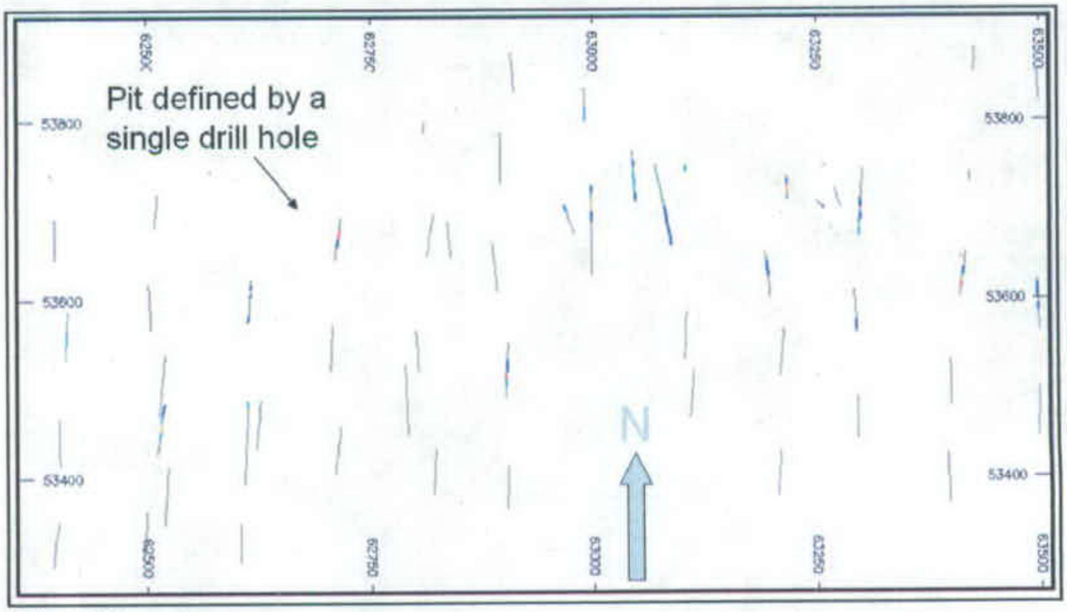
20.6.1 Toe of the Highwall

Although the height of the highwalls in McMahon Ridge are lower than Gemfield (400 feet at McMahon Ridge versus 550 feet at Gemfield), the location of the toes of the highwall which determine the final location of the highwalls is still critical. In order to optimize the highwall placement, AMEC first recommends that the quality of the drill holes defining the toe wall be checked for down-hole surveys and QAQC. The exact placement of the final highwall should then be reviewed using the original geologic data independent of the resource model. Since the drill hole data is on 100 foot centers, additional drilling may be warranted.

20.6.2 Bottom of Pit

AMEC recommends that the bottom of the pits be delineated by no less than two drill holes. The bottom of the McMahon Ridge pit was inspected and was found to have a portion of the bottom of the pit to be defined by a single drill hole, Figure 20-11. AMEC recommends that a second drill hole be drilled to confirm the mineralization at the bottom of this pit.

Figure 20-11: McMahon Ridge $500 Au Optimized Pit (looking E-NE from below topography) Showing Drill Hole Pattern in the Deepest Roots of the Pit

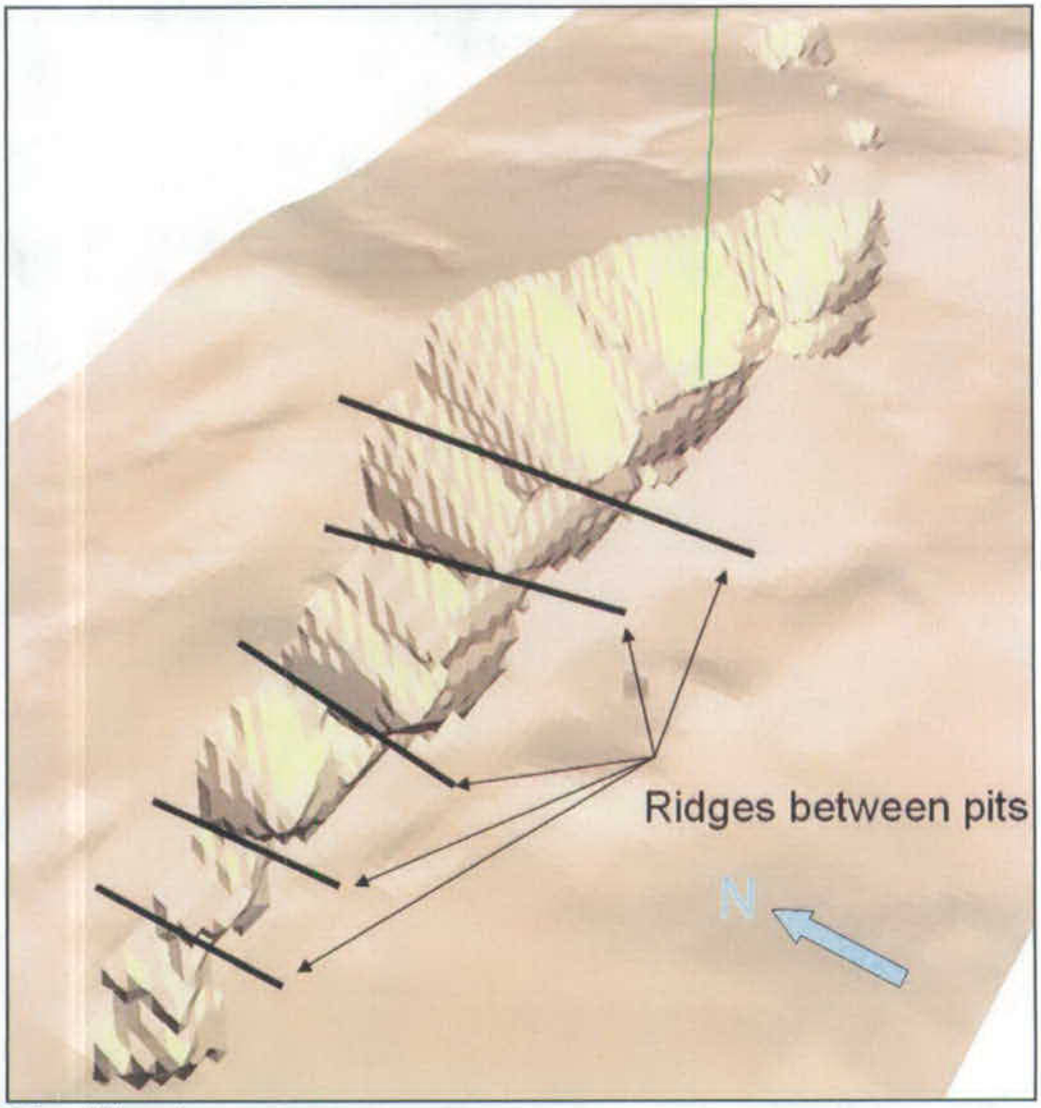


Notes: 1) No scale.

20.6.3 Ridges and Buttresses Within the Pit

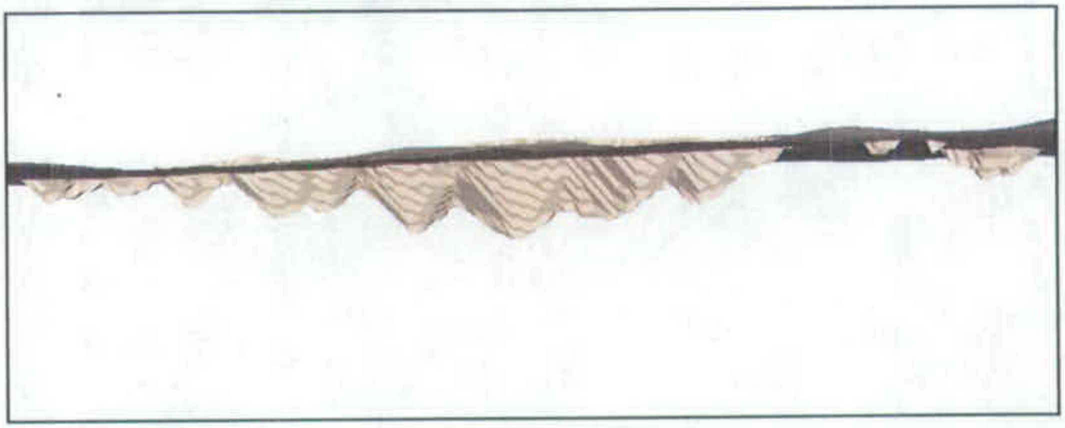
Several north-south trending ridges divide the McMahon Ridge pit into approximately 10 sub-pits and each ridge forms two buttresses where they meet the highwall (Figures 20-12 and 20-13). These ridges and buttresses will decrease the efficiency at which the pit can be mined and generate geotechnical hazards. The final pit design will probably remove these ridges and buttress which will increase the strip which will change the economics. The ridges appear to be a natural periodicity due to structure framework of the deposit and not a function of the drilling pattern. Although additional drilling will probably not remove these ridges, sensitivity studies in modeling, recovery and/or economics should be performed to determine if the ridge can be removed. Mining this material at a break-even cost may provide benefits in mining efficiency.

Figure 20-12: McMahon Ridge $500 Au Optimized Pit (looking E-NE from above topography) Showing Ridges Between Sub-pits



Notes: 1) No scale.

Figure 20-13: McMahon Ridge $500 Au Optimized Pit (longitudinal Section looking North) Showing Ridges Between Sub-pits

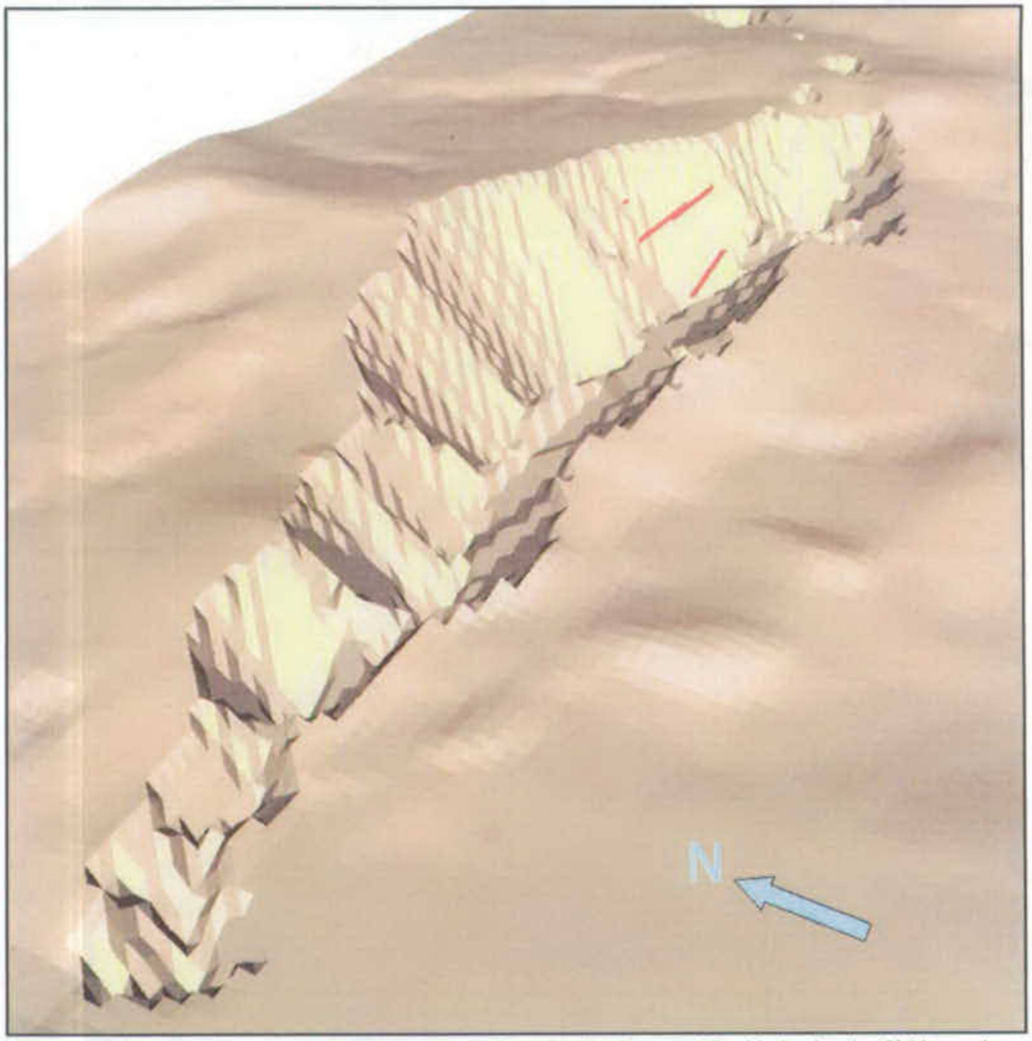


Notes: 1) No scale.

20.7 McMahon Ridge Metallurgical

Metallurgical studies are highly dependent on how representative the samples are that were used for testing. Figure 20-14 shows the location of the four core holes that were used for column tests. These drill holes do not fully cover the mineralization types within the deposit. Additional drill holes will be required to collect additional material for additional column test that should be run for at least 120 days.

Figure 20-14: McMahon Ridge $500 Au Optimized Pit with Drill Holes Used to Collect Samples for Column Tests (looking E-NE from above topography)



Notes: 1) Drill holes color coded by rock type – Gray is alluvium and Red is bedrock. 2) No scale.

20.8 McMahon Ridge Geotechnical

Core holes for geotechnical data are the same four holes for metallurgical samples (previously shown in Figure 20-14). As with Gemfield, none of the holes are in the highwall where the data is the most critical and are not representative of the entire pit. Additional drill requirements will depend on a review of the structural framework of the deposit, the geometry of the clay zones, the location of the historic underground workings, the location of the water table, the lithologic contacts and the recommendations of the geotechnical engineer reviewing the data.

20.9 Condemnation

Condemnation drilling should be conducted for the proposed heap leach pad, waste dump, all buildings and the new highway relocation. Condemnation drill plans should include contingencies for future expansion of all areas if additional room is required. If the optimal location of any of the facilities is determined to lie near the resource pit, sensitivity studies should be performed on the size of the resource pit to determine the pit will increase in size where it will encroach of the proposed facilities.

20.10 Sampling

AMEC recommends that MVG further evaluate down hole contamination in the RC drill holes prior to undertaking more detailed resource estimation.

20.11 Data Verification and QAQC

AMEC recommends:

- that Metallic Ventures consider the use of blind inserted standards, blanks, or duplicates in future drilling programs;
- that MVG should refrain from using zero in its database to indicate 'no assay', as occurs in some fields such as the check assay fields of its database, as this could be mistaken for a below-detection result.

AMEC notes a difference between assay results from the twinned RC–Core comparison, whereby RC holes are on average returning assay values 10% higher than the Core holes, which adds risk to the resource estimation process. The reason for this difference should be investigated.

20.12 Resource Estimates

AMEC recommends that:

- the compositing methodology should be based on the new indicator domains and not the historic domains based on lithology. AMEC also suggests that a shorter and consistent composite length be evaluated for future models. This will help give better definition to delineating the mineralized domains.

- the delineation between the high-grade and low-grade domains be re-evaluated so the highest grade composites are contained in the high-grade domain, and that future capping studies use a method that estimates the amount of metal at risk and the spatial relations of data available. AMEC also recommends that the capping studies be performed on the raw assays before compositing.
- The smoothness of both models be evaluated after the high-grade and low-grade domains have been better defined.
- silver should be estimated both for additional revenues and metallurgical analyses.
- the 6.1% bias in the high-grade domain and the -6.3% bias in the low-grade domain at Gemfield should be reviewed.
- the 12.9% bias in the high-grade domain at McMahon Ridge should be reviewed.

AMEC believes that the high-grade domain is too restrictive at Gemfield, and could be expanded to include more of the higher-grade composites. This would also reduce the smearing of these high-grade samples in the low-grade domain.

Although setting the minimum number of samples to one is not an issue for McMahon Ridge, AMEC still recommends that a minimum number of samples used in the modeling parameters should be no lower than three.

20.13 Processing

The geological model needs to add additional elements to the model, including silver and sulfur, in order to assist in future determination of the different mineralization types for each of the deposits. The test work executed by KCA was on high-grade composites that did not fully cover the mineralization types for each deposit. To further advance the metallurgical understanding of the deposits, it will be necessary to assemble representative composite samples of the mineralization types and the average grades to be mined. Long-term heap leach tests (120 days or greater) will be required for each of the identified mineralization types.

Further test work will be required to optimize the heap leach parameters to support a project prefeasibility study, to generate the necessary environmental information to characterize the waste rock and to characterize the spent material from a heap leach operation. Attention will be required to analyze for potential high cyanide consumers and cyanicides (including cyanide soluble copper, base metal sulfides).

20.14 Mining and Production Plan

This preliminary assessment of scoping-level economics utilizes Inferred material within the pit shells. Additional drilling to increase confidence in the resources in-pit is warranted, prior to undertaking more in-depth studies.

Evaluation of different gold prices on pit shells is recommended.

Further evaluations are needed for the Gemfield and McMahon Ridge pits, to even out the stripping profile. Evening-out could be achieved with the introduction of additional pushbacks, provided that adequate working widths can be maintained in the pits.

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22.0 DATE AND SIGNATURE PAGE

The undersigned prepared this Technical Report, titled *Preliminary Assessment, Gemfield and McMahon Ridge Deposits, Goldfield District, Nevada,* dated 25 September 2006, in support of the public disclosure of Conceptual Mine and Process Designs for the subject properties as of 25 September 2006. The format and content of the report are intended to conform to Form 43-101F1 of the National Instrument (NI 43-101) of the Canadian Securities Administrators.

Signed and Sealed

Gordon Seibel 25 September 2006

Signed and Sealed

Brian Kennedy 25 September 2006

Signed and Sealed

Scott Long 25 September 2006

Signed and Sealed

Timothy Carew 25 September 2006

Appendix A

Patented Claims

GOLDFIELD PROJECT
PATENTED CLAIMS OWNED BY METALLIC GOLDFIELD INC.
Located in Townships 2 and 3 South, Ranges 42 and 43 East, MDB&M
Esmeralda and Nye Counties, Nevada

Patented Claim Name	Patent No.	MS#
Algae	264847	3843
Atlanta	45944	2560
Bee Fraction	318051	3189
Bismark	45944	2560
Black Bear	45944	2560
Bonanza	44131	2247
Combination	46890	2557
Dick Bland Fraction	211074	3626
East Side	45842	2324
Gelatea	46221	2620
Kewana No. 2	46545	2565
Moonshine	272866	3839
Neglected	43995	2268
Nevada	46047	2609
Poloverda	211074	3626
Ridge	157709	2617
Spearhead Fraction	67610	3203
St. Ives	43593	2199
Sunflower	264847	3843
Tonopah Club	44131	2247
Union Jack	45944	2560
Velvet	264847	3843
Economist	44638	2269
Friday	44639	2270
Helena	159476	2212
Old Glory No. 2	46221	2620
Minnevada Fraction	43851	2228
Vindicator	44926	2277
Camp Bird	139277	3002
Xmas	1033599	4660
Xmas No. 1	316763	3717
Great Bend	45431	2210
Great Bend No. 1	45431	2210
Great Bend No. 2	45431	2210
Great Bend No. 3	45431	2210
Great Bend No. 4	45431	2210
Great Bend Fraction	45431	2210
Vernal No. 1	44923	2292
Vernal No. 2	45004	2275
Vernal Fraction	45004	2275
Black Butte No. 4	45004	2275
Black Butte No. 1	52115	2213
Three Friends Fraction	45017	2413
Three Friends	105637	2379
Plaza Fraction	242461	2685
White Rose	46482	2280

Patented Claim Name	Patent No.	MS#
Burnt Hill #3	45444	2300
Burnt Hill #4	45444	2300
Silver Hook	45444	2300
Silver Cup	45444	2300
Mt. Whood	45344	2497
Detroit #3	45957	2255
Golden Horse Shoe	46909	2719
Golden Horse Shoe# 1	46909	2719
Golden Horse Shoe #2	46909	2719
Golden Horse Shoe #3	46909	2719
Golden Horse Shoe #4	46909	2719
Golden Horse Shoe #5	46909	2719
Gold Bell	46046	2302
Apex	46046	2302
Lucky Strike	298890	2999
Kathryn Carol	298890	2999
Gold Gate	46551	2901
Gold Key	46551	2901
Gold Ridge	46551	2901
Bowen	163169	3236
Detroit #1	45954	2234
Detroit #2	45954	2234
Lansing	45954	2234
Last Hope	45954	2234
Virginia	44576	2332
Starlight	44576	2332
Spokane #4	252715	2921
Silver Bell	45499	2304
Watson #l	282691	3604
Watson #2	282691	3604
Apache	73781	3024
Apache #1	73781	3024
Apache #2	73781	3024
Apache #3	73781	3024
Dix #l	43181	2930
Dix #2	43181	2930
Dix #3	43181	2930
Dix #4	43181	2930
Jasper	203325	3614
Eagle	45347	2498
Red Bluff	45347	2498
Bell	45347	2498
Eagle #2	45347	2498
Carrie Bell	45347	2498
BlueJay	316764	3882
Claw Hammer	45369	2245
Kimberly DiamondField	44680	2316
Transvaal DiamondField	44680	2316
Kimberly #3	44680	2316
Jumbo	43540	2195

Patented Claim Name	Patent No.	MS#
Lucky Boy	43542	2197
Grizzley Bear	43543	2198
Clermont	43541	2196
Slim Jim Fraction	44876	2283
Mohawk No. 2	44876	2283
May Queen	45507	2534A
Combination Fraction	44602	2308
Rustler Fraction	44870	2375
Combination No. 1(all that portion of the S1/2 above the 380 ft. level)	44870	2375
Combination No. 2(all that portion of the N1/2 above the 380 ft. level)	44870	2375
Red Top	44687	2217
Little Red Top	44687	2217
Laguna	45945	2564
Last Chance	45945	2564
Miss Jessie	45945	2564
OK Fraction, (1/2 of ¾ interest in that portion lying southerly of the southerly end line of the Combination No. 2 patented lode claim extended easterly in its own direction).	45911	2566
Booth	45831	2431
Lookout	111375	2952
Reno	111375	2952
Columbus	111375	2952
Desert Rose	132432	3202A
Yankee Doodle	132432	3202A
Gold Wedge	168003	3664
Sidewa	157008	3142
Curly George	43594	2225
Boom	13594	2225
Jumbo Fraction	46352	4201
Bulldog Fraction	46351	4200
Last Dollar	219210	2598
Gold Fleece	46690	2988
Florence (These portions granted to Ralph E. Davis in the Grant Deed dated March 1, 1967 between Martin C. Duffy and Ruth Duffy, parties of the first part, and Ralph E. Davis, part of the second part, and filed in the Esmeralda County Recorder's office on April 14, 1967 in Book 3X, Page 47)	45014	2357
Cornishman (These portions granted to Ralph E. Davis in the Grant Deed dated March 1, 1967 between Martin C. Duffy and Ruth Duffy, parties of the first part, and Ralph E. Davis, part of the second part, and filed in the Esmeralda County Recorder's office on April 14, 1967 in Book 3X, Page 47)	46216	2750
Red Light	461868	2988
Vinegorone	46690	2505

Patented Claim Name	Patent No.	MS#
Red Butte No. 2		2574
Raccoon		2354
Rabbits Foot		2684
Eagle		2364
New York Fraction		2364
New York No. 2		2364
New Yourk No. 3		2364
Watson	282691	3604
Gipsy King	88071	2266
Wallcervealle	159476	2212
Mt. Whood No. 3	45344	2497
Waiting	45239	2281
Beauty	45239	2281
W.C.	45239	2281
H.M.B.	158604	3238
Marion	158604	3238
Desert Rose	71072	2922
Desert Rose No. 1	71072	2922
Kendall N1/2	45013	2397
Sandstorm S1/2	45012	2407
Goldie	43525	2235
Gold Button	316763	3717
Ramsey		2398
Unlucky Jim		4713
Oro No. 1		2529
Honey Boy		3882
Tail End		2963
Tail End Fraction		2963
Johnson No. 4		2244
Black Diamond		2265
Red Lion No. 1		2991
Red Lion No. 2		2991
Red Lion No. 3		2991
Red Lion Fraction		2991
Piedmont Fraction		2833
Black Bear Fraction		2560
Overland Fraction		2372
Louis Fraction		2660
August Fraction		2916
Midnight Fraction		2617
Deserted Fraction		2825
Evening Fraction		2533
Bulldog Fraction No. 1		2257
O.K. Fraction (1/4 interest)		2566
Central		2500
May Fraction		2232
Coga		2230
Examiner Fraction		2228
Huntch Bell 1		2320
Huntch Bell 3		2320

Patented Claim Name	Patent No.	MS#
Huntch Bell 4		2320
Huntch Bell 5		2320
Huntch Bell 9		2320
Huntch Bell 10		2320
Lucky Dog		2320
Red Flag Fraction No. 2		2320
High Rock		2964
Sunday		3023
April		2898
Mizpah No. 3		3449
Sunshine		2342
Mayflower	44120	2232
Ajax (1/3 interest)	161580	2256
Red Rock Fraction (1/2 interest)	45388	2326
Hawkeye	31382	2610
Watson	282961	3604
Primrose	45239	2281
Black Butte		3006
Fawn No. 2		3006
Lou Dillon	45242	2373
Gold Bug	31382	2610
Mt. Whood No.2	45344	2497
Success	44924	2311
Wilhemina (1/2 interest)	46904	2343
Midnight Fraction	157709	2617
Blue Grass	43851	2228
Diamond	43851	2228
Diamond Fraction	43851	2228
Lady June	43851	2228
Lookout	43851	2228
Michigan Dick	43851	2228
Mohawk	43851	2228
Wild Cat	43851	2228
Overlook		2226
Jupiter		2352
Minty No. 3 (1/2 interest)		2319
Emily		2314
Johnson No. 2		2244
Cyanogen Millsite	Blk 174 in Goldfield	
Morning Fraction		2448
Nighthawk		2323
Kewana Fraction		2902
Gold Bell		3050
Gold Locket		3050
Gold Claim		3050
Kruger		2407

GOLDFIELD PROJECT
UNPATENTED MINING CLAIMS OWNED BY METALLIC GOLDFIELD INC.
Located in Townships 2 and 3 South , Ranges 42 and 43 East, MDB&M
Nye (N) and Emeralda (E) Counties, Nevada

Claim Name	Type	Loc Date	Record Date	Co	Bk	Pg	Inst. No.	Amend Date	Bk	Pg	Inst. No.	BLM Date	BLM No.
MIK 1	Lode	1/17/1998	3/4/1998	N			439313					3/4/1998	788278
MIK 2	Lode	1/17/1998	3/4/1998	N			439314					3/4/1998	788279
MIK 3	Lode	1/17/1998	3/4/1998	N			439315	1/18/2000			491101	3/4/1998	788280
MIK 4	Lode	1/17/1998	3/4/1998	N			439316					3/4/1998	788281
MIK 5	Lode	1/17/1998	3/4/1998	N			439317	1/18/2000			491102	3/4/1998	788282
MIK 6	Lode	1/17/1998	3/4/1998	N			439318					3/4/1998	788283
MIK 7	Lode	1/17/1998	3/4/1998	N			439319	1/18/2000			491103	3/4/1998	788284
MIK 8	Lode	1/17/1998	3/4/1998	N			439320					3/4/1998	788285
MIK 9	Lode	1/17/1998	3/4/1998	N			439321	1/18/2000			491104	3/4/1998	788286
MIK 10	Lode	1/17/1998	3/4/1998	N			439322					3/4/1998	788287
MIK 11	Lode	1/17/1998	3/4/1998	N			439323					3/4/1998	788288
MIK 12	Lode	1/17/1998	3/4/1998	N			439324					3/4/1998	788289
MIK 13	Lode	1/17/1998	3/4/1998	N			439325					3/4/1998	788290
MIK 14	Lode	1/17/1998	3/4/1998	N			439326					3/4/1998	788291
MIK 17	Lode	1/17/1998	3/4/1998	E	195	84	150226	1/18/2000	203	52	152965	3/4/1998	788294
MIK 18	Lode	1/17/1998	3/4/1998	E	195	85	150227	1/18/2000	203	53	152966	3/4/1998	788295
MIK 19	Lode	1/17/1998	3/4/1998	E	195	86	150228	1/18/2000	203	54	152967	3/4/1998	788296
MIK 23	Lode	1/17/1998	3/4/1998	E	195	87	150230					3/4/1998	788297
MIK 25	Lode	3/5/1998	5/19/1998	E	195	490	150477					5/14/1998	789864
MIK 26	Lode	3/5/1998	5/19/1998	N			444610					5/14/1998	789865
MIK 27	Lode	3/5/1998	5/19/1998	E	195	491	150478					5/14/1998	789866
MIK 28	Lode	3/5/1998	5/19/1998	N			444611					5/14/1998	789867
MIK 29	Lode	3/5/1998	5/19/1998	E	195	492	150479					5/14/1998	789868
MIK 30	Lode	3/5/1998	5/19/1998	N			444612					5/14/1998	789869
MIK 31	Lode	3/5/1998	5/19/1998	E	195	493	150480					5/14/1998	789870
MIK 32	Lode	3/5/1998	5/19/1998	N			444613					5/14/1998	789871
MIK 33	Lode	3/5/1998	5/19/1998	E	195	494	150481					5/14/1998	789872
MIK 34	Lode	3/5/1998	5/19/1998	N			444614					5/14/1998	789873
MIK 35	Lode	3/5/1998	5/19/1998	E	195	495	150482					5/14/1998	789874
MIK 36	Lode	3/5/1998	5/19/1998	N			444615					5/14/1998	789875
MIK 37	Lode	3/5/1998	5/19/1998	E	195	496	150483					5/14/1998	789876
MIK 38	Lode	3/5/1998	5/19/1998	N			444616					5/14/1998	789877
MIK 39	Lode	3/5/1998	5/19/1998	E	195	497	150484					5/14/1998	789878
MIK 40	Lode	3/5/1998	5/19/1998	N			444617					5/14/1998	789879
MIK 41	Lode	3/5/1998	5/19/1998	E	195	498	150485					5/14/1998	789880
MIK 42	Lode	3/4/1998	5/19/1998	N			444618					5/14/1998	789881
MIK 43	Lode	3/4/1998	5/19/1998	N			444619					5/14/1998	789882
MIK 44	Lode	3/4/1998	5/19/1998	N			444620					5/14/1998	789883
MIK 45	Lode	3/4/1998	5/19/1998	N			444621					5/14/1998	789884

MIK 46	Lode	3/4/1998	5/19/1998	N			444622	5/14/1998	789885
MIK 47	Lode	3/4/1998	5/19/1998	N			444623	5/14/1998	789886
MIK 49	Lode	3/4/1998	5/19/1998	N			444625	5/14/1998	789888
MIK 51	Lode	3/4/1998	5/19/1998	N			444627	5/14/1998	789890
MIK 53	Lode	3/4/1998	5/19/1998	N			444629	5/14/1998	789892
MIK 55	Lode	3/4/1998	5/19/1998	N			444631	5/14/1998	789894
MIK 57	Lode	3/4/1998	5/19/1998	N			444633	5/14/1998	789896
MIK 59	Lode	3/4/1998	5/19/1998	N			444635	5/14/1998	789898
MIK 63	Lode	3/6/1998	5/19/1998	E	195	501	150488	5/14/1998	789902
MIK 64	Lode	3/6/1998	5/19/1998	E	195	502	150489	5/14/1998	789903
MIK 65	Lode	3/6/1998	5/19/1998	E	195	503	150490	5/14/1998	789904
MIK 66	Lode	3/6/1998	5/19/1998	E	195	504	150491	5/14/1998	789905
MIK 67	Lode	3/6/1998	5/19/1998	E	195	505	150492	5/14/1998	789906
MIK 68	Lode	3/6/1998	5/19/1998	E	195	506	150493	5/14/1998	789907
MIK 69	Lode	3/6/1998	5/19/1998	E	195	507	150494	5/14/1998	789908
MIK 70	Lode	3/6/1998	5/19/1998	E	195	508	150495	5/14/1998	789909
MIK 71	Lode	3/6/1998	5/19/1998	E	195	509	150496	5/14/1998	789910
MIK 72	Lode	3/6/1998	5/19/1998	E	195	510	150497	5/14/1998	789911
MIK 73	Lode	3/6/1998	5/19/1998	E	195	511	150498	5/14/1998	789912
MIK 74	Lode	3/6/1998	5/19/1998	E	195	512	150499	5/14/1998	789913
MIK 75	Lode	3/6/1998	5/19/1998	E	195	513	150500	5/14/1998	789914
MIK 76	Lode	3/6/1998	5/19/1998	E	195	514	150501	5/14/1998	789915
MIK 77	Lode	3/6/1998	5/19/1998	E	195	515	150502	5/14/1998	789916
MIK 78	Lode	3/6/1998	5/19/1998	E	195	516	150503	5/14/1998	789917

Claim Name	Type	Loc Date	Record Date	Co	Bk	Pg	Inst. No.	Amend Date	Bk	Pg	Inst. No.	BLM Date	BLM No.
MIK 79	Lode	3/6/1998	5/19/1998	E	195	517	150504					5/14/1998	789918
MIK 80	Lode	3/6/1998	5/19/1998	E	195	518	150505					5/14/1998	789919
MIK 81	Lode	3/6/1998	5/19/1998	E	195	519	150506					5/14/1998	789920
MIK 82	Lode	3/6/1998	5/19/1998	E	195	520	150507					5/14/1998	789921
MIK 83	Lode	3/6/1998	5/19/1998	E	195	521	150508					5/14/1998	789922
MIK 84	Lode	3/6/1998	5/19/1998	E	195	522	150509					5/14/1998	789923
MIK 85	Lode	3/6/1998	5/19/1998	E	195	523	150510					5/14/1998	789924
MIK 86	Lode	3/6/1998	5/19/1998	E	195	524	150511					5/14/1998	789925
MIK 87	Lode	3/6/1998	5/19/1998	E	195	525	150512					5/14/1998	789926
MIK 88	Lode	3/6/1998	5/19/1998	E	195	526	150513					5/14/1998	789927
MIK 89	Lode	3/6/1998	5/19/1998	E	195	527	150514					5/14/1998	789928
MIK 90	Lode	3/6/1998	5/19/1998	E	195	528	150515					5/14/1998	789929
MIK 93	Lode	3/7/1998	5/19/1998	N			444637					5/14/1998	789932
MIK 95	Lode	3/7/1998	5/19/1998	N			444639					5/14/1998	789934
MIK 97	Lode	3/7/1998	5/19/1998	N			444641					5/14/1998	789936
MIK 99	Lode	3/7/1998	5/19/1998	N			444643					5/14/1998	789938
MIK 101	Lode	3/7/1998	5/19/1998	N			444645					5/14/1998	789940
MIK 103	Lode	5/22/1998	7/8/1998	N			448438					7/8/1998	790979
MIK 104	Lode	5/22/1998	7/8/1998	N			448439					7/8/1998	790980
MIK 105	Lode	5/22/1998	7/8/1998	N			448440					7/8/1998	790981
MIK 106	Lode	5/22/1998	7/8/1998	N			448441					7/8/1998	790982
MIK 107	Lode	5/22/1998	7/8/1998	N			448442					7/8/1998	790983
MIK 108	Lode	5/22/1998	7/8/1998	N			448443					7/8/1998	790984
MIK 109	Lode	5/22/1998	7/8/1998	N			448444					7/8/1998	790985
MIK 110	Lode	5/22/1998	7/8/1998	N			448445					7/8/1998	790986
MIK 112	Lode	5/22/1998	7/8/1998	N			448447					7/8/1998	790988
MIK 113	Lode	5/22/1998	7/8/1998	N			448448					7/8/1998	790989
MIK 114	Lode	5/22/1998	7/8/1998	N			448449					7/8/1998	790990
MIK 115	Lode	5/22/1998	7/8/1998	N			448450					7/8/1998	790991
MIK 116	Lode	5/22/1998	7/8/1998	N			448451					7/8/1998	790992
MIK 117	Lode	5/22/1998	7/8/1998	N			448452					7/8/1998	790993
MIK 118	Lode	5/22/1998	7/8/1998	N			448453					7/8/1998	790994
MIK 124	Lode	5/22/1998	7/8/1998	N			448459					7/8/1998	791000
MIK 92	Lode	9/24/1998	11/6/1998	E	198	196	151344					11/6/1998	793469
MIK 139	Lode	9/3/1998	11/9/1998	N			456701					11/6/1998	793483
MIK 140	Lode	9/3/1998	11/9/1998	N			456702					11/6/1998	793484
MIK 142	Lode	9/3/1998	11/9/1998	N			456704					11/6/1998	793486
MIK 144	Lode	9/3/1998	11/9/1998	N			456706					11/6/1998	793488
MIK 145	Lode	9/3/1998	11/9/1998	N			456707					11/6/1998	793489
MIK 146	Lode	9/3/1998	11/9/1998	N			456708					11/6/1998	793490
MIK 148	Lode	9/3/1998	11/9/1998	N			456710					11/6/1998	793492
MIK 149	Lode	9/3/1998	11/9/1998	N			456711					11/6/1998	793493
DIX 1	Lode	4/17/1998	7/8/1998	N			448412					7/8/1998	791002
DIX 2	Lode	4/17/1998	7/8/1998	N			448413					7/8/1998	791003

DIX 3	Lode	4/17/1998	7/8/1998	N			448414	7/8/1998	791004
DIX 4	Lode	4/17/1998	7/8/1998	N			448415	7/8/1998	791005
DIX 5	Lode	4/17/1998	7/8/1998	N			448416	7/8/1998	791006
DIX 6	Lode	4/17/1998	7/8/1998	N			448417	7/8/1998	791007
DIX 7	Lode	4/17/1998	7/8/1998	N			448418	7/8/1998	791008
DIX 8	Lode	4/17/1998	7/8/1998	N			448419	7/8/1998	791009
DIX 9	Lode	4/17/1998	7/8/1998	N			448420	7/8/1998	791010
DIX 10	Lode	4/17/1998	7/8/1998	N			448421	7/8/1998	791011
DIX 11	Lode	4/17/1998	7/8/1998	N			448422	7/8/1998	791012
DIX 12	Lode	4/17/1998	7/8/1998	N			448423	7/8/1998	791013
DIX 13	Lode	4/17/1998	7/8/1998	N			448424	7/8/1998	791014
DIX 14	Lode	4/17/1998	7/8/1998	N			448425	7/8/1998	791015
DIX 15	Lode	4/17/1998	7/8/1998	N			448426	7/8/1998	791016
DIX 16	Lode	4/17/1998	7/8/1998	N			448427	7/8/1998	791017
DIX 17	Lode	4/17/1998	7/8/1998	N			448428	7/8/1998	791018
DIX 18	Lode	4/17/1998	7/8/1998	N			448429	7/8/1998	791019
DIX 19	Lode	4/17/1998	7/8/1998	N			448430	7/8/1998	791020
DIX 20	Lode	4/17/1998	7/8/1998	N			448431	7/8/1998	791021
Boyer Fraction	Lode	12/19/1998	3/12/1999	E	199	59	151660	3/12/1999	801606
HB-18	Lode	12/17/1998	3/12/1999	E	199	60	151661	3/12/1999	801607
SF	Lode	12/18/1998	3/12/1999	E	199	67	151668	3/12/1999	801614
Adams	Lode	12/20/1998	3/12/1999	E	199	68	151669	3/12/1999	801615
Excelsior-5	Lode	12/16/1998	3/12/1999	E	199	69	151670	3/12/1999	801616
Fawn	Lode	12/20/1998	3/12/1999	E	199	70	151671	3/12/1999	801617

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Jack	Lode	12/20/1998	3/12/1999	E	199	72	151673					3/12/1999	801619
Gold Ledge-1	Lode	12/20/1998	3/12/1999	E	199	73	151674					3/12/1999	801620
Gold Ledge-2	Lode	12/20/1998	3/12/1999	E	199	74	151675	1/18/2000	203	55	152968	3/12/1999	801621
Queen	Lode	12/20/1998	3/12/1999	E	199	77	151678					3/12/1999	801624
Spearhead Fraction	Lode	12/20/1998	3/12/1999	E	199	79	151680					3/12/1999	801626
Buffalo	Lode	12/15/1998	3/12/1999	E	199	82	151683					3/12/1999	801629
Bullfrog	Lode	12/15/1998	3/12/1999	E	199	83	151684					3/12/1999	801630
Little Pedro #1	Lode	12/16/1998	3/12/1999	E	199	85	151686					3/12/1999	801632
Little Pedro #2	Lode	12/16/1998	3/12/1999	E	199	86	151687					3/12/1999	801633
Little Pedro #3	Lode	12/16/1998	3/12/1999	E	199	87	151688					3/12/1999	801634
Little Pedro #4	Lode	12/16/1998	3/12/1999	E	199	88	151689					3/12/1999	801635
Lula	Lode	12/16/1998	3/12/1999	E	199	89	151690					3/12/1999	801636
MIK-154	Lode	12/15/1998	3/12/1999	E	199	90	151691					3/12/1999	801637
Vernal-Daisy	Lode	12/16/1998	3/12/1999	E	199	91	151692					3/12/1999	801638
Y2K - 1	Lode	1/19/2000	4/6/2000	E	203	56	152969					4/7/2000	814841
Y2K - 2	Lode	1/19/2000	4/6/2000	E	203	57	152970					4/7/2000	814842
Y2K - 3	Lode	1/19/2000	4/6/2000	E	203	58	152971					4/7/2000	814843
Y2K - 4	Lode	1/19/2000	4/6/2000	E	203	59	152972					4/7/2000	814844
Y2K - 5	Lode	1/20/2000	4/6/2000	E	203	60	152973					4/7/2000	814845
Y2K - 6	Lode	1/20/2000	4/6/2000	E	203	61	152974					4/7/2000	814846
Y2K - 8	Lode	1/20/2000	4/6/2000	E	203	63	152976					4/7/2000	814848
Y2K - 9	Lode	1/20/2000	4/6/2000	E	203	64	152977					4/7/2000	814849
Y2K - 10	Lode	1/20/2000	4/6/2000	E	203	65	152978					4/7/2000	814850
Y2K - 11	Lode	1/20/2000	4/6/2000	E	203	66	152979					4/7/2000	814851
Y2K - 12	Lode	1/20/2000	4/6/2000	E	203	67	152980					4/7/2000	814852
Y2K - 13	Lode	1/19/2000	4/6/2000	E	203	68	152981					4/7/2000	814853
Y2K - 14	Lode	1/19/2000	4/6/2000	E	203	69	152982					4/7/2000	814854
Y2K - 15	Lode	1/19/2000	4/6/2000	E	203	70	152983					4/7/2000	814855
B&B 1	Lode			E	188	58							757476
B&B 2	Lode			E	188	59							757477
B&B 3	Lode			E	188	60							757478
B&B 4	Lode			E	188	61							757479
B&B 5	Lode			E	188	62							757480
B&B 6	Lode			E	188	63							757481
B&B 7	Lode			E	188	64							757482
B&B 8	Lode			E	188	65							757483
B&B 9	Lode			E	188	66							757484
B&B 10	Lode			E	188	67							757485
B&B 11	Lode			E	188	68							757486
B&B 12	Lode			E	188	69							757487
B&B 13	Lode			E	188	70							757488
B&B 14	Lode			E	188	71							757489
Batwing 1	Lode			E	191	107							773703
CGM 1	Lode			E	191	109							773704
CGM 2	Lode			E	191	110							773705

KM 30	Lode		E	191	113						773706
KM 31	Lode		E	191	114						773707
MW 4	Lode		E	191	123						773708
MW 5	Lode		E	191	124						773709
MW 7	Lode		E	191	125						773710
MW 8	Lode		E	191	126						773711
MW 9	Lode		E	191	127						773712
MW 10	Lode		E	191	128						773713
MW 11	Lode		E	191	129						773714
MW 12	Lode		E	191	130						773715
MW 13	Lode		E	191	131						773716
MW 14	Lode		E	191	132						773717
MW 15	Lode		E	191	133						773718
MW 16	Lode		E	191	134						773719
MW 17	Lode		E	191	135						773720
MW 23	Lode		E	191	136						773721
MW 24	Lode		E	191	137						773722
Red East	Lode	4/20/1997	E	191	111	6/12/2003	220	146	158218	6/20/2003	773723
Red West	Lode		E	191	112						773724
Southern Rose	Lode		E	191	108						773725
Wash 4	Lode		E	191	115						773726
Wash 5	Lode		E	191	116						773727
Wash 6	Lode		E	191	117						773728

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Wash 7	Lode			E	191	118							773729
Wash 8	Lode			E	191	119							773730
Wash 9	Lode			E	191	120							773731
Wash 10	Lode			E	191	121							773732
Wash 11	Lode			E	191	122							773733
V 31	Lode			E	194	68							783815
V 32	Lode			E	194	69							783816
V 33	Lode			E	194	70							783817
V 34	Lode			E	194	71							783818
V 35	Lode			E	194	72							783819
V 36	Lode			E	194	73							783820
V 37	Lode			E	194	74							783821
V 38	Lode			E	194	75							783822
V 39A	Lode			E	194	76							783823
V 39	Lode			E	194	77							783824
V 40	Lode			E	194	78							783825
V 41	Lode			E	194	79							783826
V 42	Lode			E	194	80							783827
V 43A	Lode			E	194	81							783828
V 43	Lode			E	194	82							783829
V 44	Lode			E	194	83							783830
V 45	Lode			E	194	84							783831
V 46	Lode			E	194	85							783832
V 47	Lode			E	194	86							783833
V 48	Lode			E	194	87							783834
V 49	Lode			E	194	88							783835
V 50	Lode			E	194	89							783836
V 51	Lode			E	194	90							783837
V 52	Lode			E	194	91							783838
V 53	Lode			E	194	92							783839
V 54	Lode			E	194	93							783840
V 55	Lode			E	194	94							783841
V 56	Lode			E	194	95							783842
V 57	Lode			E	194	96							783843
V 58	Lode			E	194	97							783844
V 59	Lode			E	194	98							783845
V 60	Lode			E	194	99							783846
V 61	Lode			E	194	100							783847
V 62	Lode			E	194	101							783848
V 63	Lode			E	194	102							783849
V 64	Lode			E	194	103							783850
V 65	Lode			E	194	104							783851
V 66	Lode			E	194	105							783852
REB 1	Lode	5/7/2002	7/15/2002	E	213	49	156147					6/27/2002	829904
REB 2	Lode	5/7/2002	7/15/2002	E	213	50	156148					6/27/2002	829905
REB 3	Lode	5/7/2002	7/15/2002	E	213	51	156149					6/27/2002	829906

REB 4	Lode	5/7/2002	7/15/2002	E	213	52	156150	6/27/2002	829907
REB 5	Lode	5/7/2002	7/15/2002	E	213	53	156151	6/27/2002	829908
REB 6	Lode	8/1/2002	10/16/2002	E	214	230	156528	10/15/2002	832308
REB 7	Lode	8/1/2002	10/16/2002	E	214	231	156530	10/15/2002	832309
REB 8	Lode	8/1/2002	10/16/2002	E	214	232	156531	10/15/2002	832310
REB 9	Lode	8/1/2002	10/16/2002	E	214	233	156532	10/15/2002	832311
REB 10	Lode	8/1/2002	10/16/2002	E	214	234	156533	10/15/2002	832312
REB 11	Lode	8/1/2002	10/16/2002	E	214	235	156534	10/15/2002	832313
REB 12	Lode	8/1/2002	10/16/2002	E	214	236	156535	10/15/2002	832314
Y2K 7	Lode	8/1/2002	10/16/2002	E	214	237	156537	10/15/2002	832315
GFE 19	Lode	8/6/2002	10/16/2002	E	214	238	156539	10/15/2002	832316
GFE 20	Lode	8/6/2002	10/16/2002	E	214	239	156540	10/15/2002	832317
GFE 21	Lode	8/6/2002	10/16/2002	E	214	240	156541	10/15/2002	832318
GFE 22	Lode	8/6/2002	10/16/2002	E	214	241	156542	10/15/2002	832319
GFE 23	Lode	8/6/2002	10/16/2002	E	214	242	156543	10/15/2002	832320
GFE 24	Lode	8/6/2002	10/16/2002	E	214	243	156544	10/15/2002	832321
GFE 25	Lode	8/6/2002	10/16/2002	E	214	244	156545	10/15/2002	832322
GFE 26	Lode	8/6/2002	10/16/2002	E	214	245	156546	10/15/2002	832323
GFE 27	Lode	8/6/2002	10/16/2002	E	214	246	156547	10/15/2002	832324
GFE 28	Lode	8/6/2002	10/16/2002	E	214	247	156548	10/15/2002	832325
GFE 29	Lode	8/6/2002	10/16/2002	E	214	248	156549	10/15/2002	832326
GFE 30	Lode	8/6/2002	10/16/2002	E	214	249	156550	10/15/2002	832327

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GFE 31	Lode	8/6/2002	10/16/2002	E	214	250	156551					10/15/2002	832328
GFE 32	Lode	8/6/2002	10/16/2002	E	214	251	156552					10/15/2002	832329
GFE 33	Lode	8/6/2002	10/16/2002	E	214	252	156553					10/15/2002	832330
GFE 34	Lode	8/6/2002	10/16/2002	E	214	253	156554					10/15/2002	832331
GFE 35	Lode	8/6/2002	10/16/2002	E	214	254	156555					10/15/2002	832332
GFE 36	Lode	8/6/2002	10/16/2002	E	214	255	156556					10/15/2002	832333
GFE 37	Lode	8/6/2002	10/16/2002	E	214	256	156557					10/15/2002	832334
GFE 38	Lode	8/6/2002	10/16/2002	E	214	257	156558					10/15/2002	832335
GFE 39	Lode	8/6/2002	10/16/2002	E	214	258	156559					10/15/2002	832336
GFE 40	Lode	8/6/2002	10/16/2002	E	214	259	156560					10/15/2002	832337
GFE 41	Lode	8/6/2002	10/16/2002	E	214	260	156561					10/15/2002	832338
GFE 42	Lode	8/6/2002	10/16/2002	E	214	261	156562					10/15/2002	832339
GFE 43	Lode	8/6/2002	10/16/2002	E	214	262	156563					10/15/2002	832340
GFE 44	Lode	8/6/2002	10/16/2002	E	214	263	156564					10/15/2002	832341
GFE 45	Lode	8/6/2002	10/16/2002	E	214	264	156565					10/15/2002	832342
GFE 46	Lode	8/6/2002	10/16/2002	E	214	265	156566					10/15/2002	832343
GFE 47	Lode	8/6/2002	10/16/2002	E	214	266	156567					10/15/2002	832344
GFE 48	Lode	8/6/2002	10/16/2002	E	214	267	156568					10/15/2002	832345
GFE 49	Lode	8/6/2002	10/16/2002	E	214	268	156569					10/15/2002	832346
GFE 50	Lode	8/6/2002	10/16/2002	E	214	269	156570					10/15/2002	832347
GFE 97	Lode	8/6/2002	10/16/2002	E	214	270	156571					10/15/2002	832348
GFE 98	Lode	8/6/2002	10/16/2002	E	214	271	156572					10/15/2002	832349
GFE 99	Lode	8/6/2002	10/16/2002	E	214	272	156573					10/15/2002	832350
GFE 105	Lode	8/10/2002	10/16/2002	E	214	273	156574					10/15/2002	832351
GFE 106	Lode	8/10/2002	10/16/2002	E	214	274	156575					10/15/2002	832352
GFE 107	Lode	8/10/2002	10/16/2002	E	214	275	156576					10/15/2002	832353
GFE 108	Lode	8/10/2002	10/16/2002	E	214	276	156577					10/15/2002	832354
GFE 109	Lode	8/10/2002	10/16/2002	E	214	277	156578					10/15/2002	832355
GFE 110	Lode	8/10/2002	10/16/2002	E	214	278	156579					10/15/2002	832356
GFE 111	Lode	8/10/2002	10/16/2002	E	214	279	156580					10/15/2002	832357
GFE 112	Lode	8/10/2002	10/16/2002	E	214	280	156581					10/15/2002	832358
GFE 113	Lode	8/10/2002	10/16/2002	E	214	281	156582					10/15/2002	832359
GFE 114	Lode	8/10/2002	10/16/2002	E	214	282	156583					10/15/2002	832360
GFE 115	Lode	8/10/2002	10/16/2002	E	214	283	156584					10/15/2002	832361
GFE 116	Lode	8/10/2002	10/16/2002	E	214	284	156585					10/15/2002	832362
GFE 117	Lode	8/10/2002	10/16/2002	E	214	285	156586					10/15/2002	832363
GFE 118	Lode	8/10/2002	10/16/2002	E	214	286	156587					10/15/2002	832364
GFE 119	Lode	8/10/2002	10/16/2002	E	214	287	156588					10/15/2002	832365
GFE 120	Lode	8/10/2002	10/16/2002	E	214	288	156589					10/15/2002	832366
GFE 121	Lode	8/10/2002	10/16/2002	E	214	289	156590					10/15/2002	832367
GFE 122	Lode	8/10/2002	10/16/2002	E	214	290	156591					10/15/2002	832368
GFE 123	Lode	8/10/2002	10/16/2002	E	214	291	156592					10/15/2002	832369
GFE 124	Lode	8/10/2002	10/16/2002	E	214	292	156593					10/15/2002	832370
MX 55	Lode	8/8/2002	10/16/2002	E	214	293	156594					10/15/2002	832371

MX 56	Lode	8/8/2002	10/16/2002	E	214	294	156595	10/15/2002	832372
MX 57	Lode	8/8/2002	10/16/2002	E	214	295	156596	10/15/2002	832373
MX 58	Lode	8/8/2002	10/16/2002	E	214	296	156597	10/15/2002	832374
MX 59	Lode	8/8/2002	10/16/2002	E	214	297	156598	10/15/2002	832375
MX 60	Lode	8/8/2002	10/16/2002	E	214	298	156599	10/15/2002	832376
MX 61	Lode	8/8/2002	10/16/2002	E	214	299	156600	10/15/2002	832377
MX 62	Lode	8/8/2002	10/16/2002	E	214	300	156601	10/15/2002	832378
MX 107	Lode	8/8/2002	10/16/2002	E	214	301	156602	10/15/2002	832379
MX 108	Lode	8/8/2002	10/16/2002	E	214	302	156603	10/15/2002	832380
MX 109	Lode	8/8/2002	10/16/2002	E	214	303	156604	10/15/2002	832381
MX 110	Lode	8/8/2002	10/16/2002	E	214	304	156605	10/15/2002	832382
MX 111	Lode	8/8/2002	10/16/2002	E	214	305	156606	10/15/2002	832383
MX 112	Lode	8/8/2002	10/16/2002	E	214	306	156607	10/15/2002	832384
MGI 1	Lode	3/7/2003	5/23/2003	E	218	416	157872	5/22/2003	847774
MGI 2	Lode	3/8/2003	5/23/2003	E	218	417	157873	5/22/2003	847775
MGI 3	Lode	3/9/2003	5/23/2003	E	218	418	157874	5/22/2003	847776
MGI 4	Lode	3/10/2003	5/23/2003	E	218	419	157875	5/22/2003	847777
MGI 5	Lode	3/11/2003	5/23/2003	E	218	420	157876	5/22/2003	847778
MGI 6	Lode	3/12/2003	5/23/2003	E	218	421	157877	5/22/2003	847779
REB 13	Lode	2/26/2003	5/23/2003	E	218	422	157879	5/22/2003	847780
REB 14	Lode	2/26/2003	5/23/2003	E	218	423	157880	5/22/2003	847781
REB 15	Lode	2/26/2003	5/23/2003	E	218	424	157881	5/22/2003	847782
REB 16	Lode	2/26/2003	5/23/2003	E	218	425	157882	5/22/2003	847783
REB 17	Lode	2/26/2003	5/23/2003	E	218	426	157883	5/22/2003	847784

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REB 18	Lode	2/26/2003	5/23/2003	E	218	427	157884					5/22/2003	847785
American	Lode	4/23/2003	6/10/2003	E	219	342	158099					6/9/2003	848306
Amy #1	Lode	4/23/2003	6/10/2003	E	219	343	158100					6/9/2003	848307
Banner	Lode	4/23/2003	6/10/2003	E	219	312	158068					6/9/2003	848308
BBE	Lode	3/15/2003	6/10/2003	E	219	313	158069					6/9/2003	848309
Belle	Lode	3/15/2003	6/10/2003	E	219	344	158101					6/9/2003	848310
Cherokee	Lode	3/15/2003	6/10/2003	E	219	314	158070					6/9/2003	848311
Claw	Lode	3/14/2003	6/10/2003	E	219	315	158071					6/9/2003	848312
Day Break	Lode	4/23/2003	6/10/2003	E	219	345	158102					6/9/2003	848313
Dip	Lode	3/16/2003	6/10/2003	E	219	316	158072					6/9/2003	848314
East	Lode	3/16/2003	6/10/2003	E	219	352	158110					6/9/2003	848315
Gate	Lode	3/16/2003	6/10/2003	E	219	353	158111					6/9/2003	848316
Goldfield	Lode	3/16/2003	6/10/2003	E	219	317	158073					6/9/2003	848317
Goldfield Fraction	Lode	3/16/2003	6/10/2003	E	219	318	158074					6/9/2003	848318
GR	Lode	4/23/2003	6/10/2003	E	219	356	158115					6/9/2003	848319
High Red	Lode	3/15/2003	6/10/2003	E	219	346	158103					6/9/2003	848320
Jack Ass 1	Lode	3/14/2003	6/10/2003	E	219	319	158075					6/9/2003	848321
Johnson	Lode	3/14/2003	6/10/2003	E	219	320	158076					6/9/2003	848322
Last Chance 1	Lode	3/15/2003	6/10/2003	E	219	321	158077					6/9/2003	848323
Last Chance 2	Lode	3/15/2003	6/10/2003	E	219	322	158078					6/9/2003	848324
Lion	Lode	4/23/2003	6/10/2003	E	219	323	158079					6/9/2003	848325
Little Gate	Lode	3/16/2003	6/10/2003	E	219	349	158107					6/9/2003	848326
MGI 7	Lode	4/19/2003	6/10/2003	E	219	357	158117					6/9/2003	848327
MGI 8	Lode	4/19/2003	6/10/2003	E	219	358	158118					6/9/2003	848328
MGI 9	Lode	4/19/2003	6/10/2003	E	219	359	158119					6/9/2003	848329
MGI 10	Lode	4/19/2003	6/10/2003	E	219	360	158120					6/9/2003	848330
MGI 11	Lode	4/19/2003	6/10/2003	E	219	361	158121					6/9/2003	848331
MGI 12	Lode	4/18/2003	6/10/2003	E	219	362	158122					6/9/2003	848332
MGI 13	Lode	4/19/2003	6/10/2003	E	219	363	158123					6/9/2003	848333
MGI 14	Lode	4/19/2003	6/10/2003	E	219	364	158124					6/9/2003	848334
MGI 15	Lode	4/19/2003	6/10/2003	E	219	365	158125					6/9/2003	848335
MGI 16	Lode	4/19/2003	6/10/2003	E	219	366	158126					6/9/2003	848336
MGI 17	Lode	4/19/2003	6/10/2003	E	219	367	158127					6/9/2003	848337
MGI 18	Lode	4/19/2003	6/10/2003	E	219	368	158128					6/9/2003	848338
MGI 19	Lode	4/19/2003	6/10/2003	E	219	369	158129					6/9/2003	848339
MGI 20	Lode	4/19/2003	6/10/2003	E	219	370	158130					6/9/2003	848340
MGI 21	Lode	4/19/2003	6/10/2003	E	219	371	158131					6/9/2003	848341
MGI 22	Lode	4/19/2003	6/10/2003	E	219	372	158132					6/9/2003	848342
MGI 23	Lode	4/19/2003	6/10/2003	E	219	373	158133					6/9/2003	848343
MGI 24	Lode	4/19/2003	6/10/2003	E	219	374	158134					6/9/2003	848344
MGI 25	Lode	4/19/2003	6/10/2003	E	219	375	158135					6/9/2003	848345

MGI 26	Lode	4/19/2003	6/10/2003	E	219	376	158136	6/9/2003	848346
MGI 27	Lode	4/19/2003	6/10/2003	E	219	377	158137	6/9/2003	848347
MGI 28	Lode	4/19/2003	6/10/2003	E	219	378	158138	6/9/2003	848348
MGI 29	Lode	4/19/2003	6/10/2003	E	219	379	158139	6/9/2003	848349
MGI 30	Lode	4/19/2003	6/10/2003	E	219	380	158140	6/9/2003	848350
MGI 31	Lode	4/20/2003	6/10/2003	E	219	381	158141	6/9/2003	848351
MGI 32	Lode	4/20/2003	6/10/2003	E	219	382	158142	6/9/2003	848352
MGI 33	Lode	4/20/2003	6/10/2003	E	219	383	158143	6/9/2003	848353
MGI 34	Lode	4/20/2003	6/10/2003	E	219	384	158144	6/9/2003	848354
MGI 35	Lode	4/20/2003	6/10/2003	E	219	385	158145	6/9/2003	848355
MGI 36	Lode	4/20/2003	6/10/2003	E	219	386	158146	6/9/2003	848356
MGI 37	Lode	4/20/2003	6/10/2003	E	219	387	158147	6/9/2003	848357
MGI 38	Lode	4/20/2003	6/10/2003	E	219	388	158148	6/9/2003	848358
MGI 39	Lode	4/20/2003	6/10/2003	E	219	389	158149	6/9/2003	848359
MGI 40	Lode	4/20/2003	6/10/2003	E	219	390	158150	6/9/2003	848360
MGI 41	Lode	4/20/2003	6/10/2003	E	219	391	158151	6/9/2003	848361
MGI 42	Lode	4/20/2003	6/10/2003	E	219	392	158152	6/9/2003	848362
MGI 43	Lode	4/20/2003	6/10/2003	E	219	393	158153	6/9/2003	848363
Mizpah 6	Lode	3/15/2003	6/10/2003	E	219	324	158080	6/9/2003	848364
Mizpah 6 Extension	Lode	3/15/2003	6/10/2003	E	219	325	158081	6/9/2003	848365
NBF	Lode	3/17/2003	6/10/2003	E	219	347	158104	6/9/2003	848366
North Apple	Lode	3/14/2003	6/10/2003	E	219	326	158082	6/9/2003	848367
Pedro 5	Lode	3/14/2003	6/10/2003	E	219	328	158084	6/9/2003	848368
Pedro 6	Lode	3/14/2003	6/10/2003	E	219	329	158085	6/9/2003	848369
Pedro 7	Lode	3/14/2003	6/10/2003	E	219	330	158086	6/9/2003	848370
Pedro 8	Lode	3/14/2003	6/10/2003	E	219	331	158087	6/9/2003	848371
RBF	Lode	3/19/2003	6/10/2003	E	219	348	158105	6/9/2003	848372

Claim Name	Type	Loc Date	Record Date	Co	Bk	Pg	Inst. No.	Amend Date	Bk	Pg	Inst. No.	BLM Date	BLM No.
Red Top	Lode	3/16/2003	6/10/2003	E	219	351	158109					6/9/2003	848373
Sierra 1	Lode	3/14/2003	6/10/2003	E	219	332	158088					6/9/2003	848374
Slim	Lode	3/16/2003	6/10/2003	E	219	350	158108					6/9/2003	848375
South Apple	Lode	3/14/2003	6/10/2003	E	219	327	158083					6/9/2003	848376
Toga	Lode	3/14/2003	6/10/2003	E	219	333	158089					6/9/2003	848377
TRUE	Lode	3/15/2003	6/10/2003	E	219	334	158090					6/9/2003	848378
Violet	Lode	3/16/2003	6/10/2003	E	219	335	158091					6/9/2003	848379
Water	Lode	3/14/2003	6/10/2003	E	219	336	158092					6/9/2003	848380
Whynot 1	Lode	3/15/2003	6/10/2003	E	219	354	158112					6/9/2003	848381
Whynot 2	Lode	3/15/2003	6/10/2003	E	219	355	158113					6/9/2003	848382
Wild Rose 1	Lode	3/19/2003	6/10/2003	E	219	337	158093					6/9/2003	848383
Wild Rose 2	Lode	3/19/2003	6/10/2003	E	219	338	158094					6/9/2003	848384
Wild Rose 3	Lode	3/19/2003	6/10/2003	E	219	339	158095					6/9/2003	848385
Wild Rose 4	Lode	3/19/2003	6/10/2003	E	219	340	158096					6/9/2003	848386
Wild Rose 5	Lode	3/19/2003	6/10/2003	E	219	341	158097					6/9/2003	848387
MIK 48	Lode	4/5/2003	6/11/2003	N			564576					6/9/2003	848388
MIK 50	Lode	4/5/2003	6/11/2003	N			564577					6/9/2003	848389
MIK 52	Lode	4/5/2003	6/11/2003	N			564578					6/9/2003	848390
MIK 54	Lode	4/5/2003	6/11/2003	N			564579					6/9/2003	848391
MIK 56	Lode	4/5/2003	6/11/2003	N			564580					6/9/2003	848392
MIK 58	Lode	4/5/2003	6/11/2003	N			564581					6/9/2003	848393
MIK 60	Lode	4/5/2003	6/11/2003	N			564582					6/9/2003	848394
MIK 94	Lode	4/23/2003	6/11/2003	N			564583					6/9/2003	848395
MIK 96	Lode	4/23/2003	6/11/2003	N			564584					6/9/2003	848396
MIK 98	Lode	4/23/2003	6/11/2003	N			564585					6/9/2003	848397
MIK 100	Lode	4/23/2003	6/11/2003	N			564586					6/9/2003	848398
MIK 102	Lode	4/23/2003	6/11/2003	N			564587					6/9/2003	848399
MIK 111	Lode	4/6/2003	6/11/2003	N			564588					6/9/2003	848400
MIK 119	Lode	5/13/2003	6/11/2003	N			564589					6/9/2003	848401
MIK 120	Lode	4/23/2003	6/11/2003	N			564590					6/9/2003	848402
MIK 121	Lode	4/23/2003	6/11/2003	N			564591					6/9/2003	848403
MIK 122	Lode	4/23/2003	6/11/2003	N			564592					6/9/2003	848404
MIK 123	Lode	4/23/2003	6/11/2003	N			564593					6/9/2003	848405
MIK 125	Lode	4/23/2003	6/11/2003	N			564594					6/9/2003	848406
MIK 126	Lode	5/13/2003	6/11/2003	N			564595					6/9/2003	848407
MIK 127	Lode	5/13/2003	6/11/2003	N			564596					6/9/2003	848408
MIK 128	Lode	5/13/2003	6/11/2003	N			564597					6/9/2003	848409
MIK 129	Lode	5/13/2003	6/11/2003	N			564598					6/9/2003	848410
MIK 130	Lode	5/13/2003	6/11/2003	N			564599					6/9/2003	848411
MIK 131	Lode	5/13/2003	6/11/2003	N			564600					6/9/2003	848412
MIK 132	Lode	5/13/2003	6/11/2003	N			564601					6/9/2003	848413
MIK 133	Lode	5/13/2003	6/11/2003	N			564602					6/9/2003	848414
MIK 134	Lode	5/13/2003	6/11/2003	N			564603					6/9/2003	848415
MIK 135	Lode	5/13/2003	6/11/2003	N			564604					6/9/2003	848416

MIK 136	Lode	4/5/2003	6/11/2003	N	564605	6/9/2003	848417
MIK 137	Lode	4/6/2003	6/11/2003	N	564606	6/9/2003	848418
MIK 138	Lode	4/6/2003	6/11/2003	N	564607	6/9/2003	848419
MIK 141	Lode	4/6/2003	6/11/2003	N	564608	6/9/2003	848420
MIK 151	Lode	4/5/2003	6/11/2003	N	564609	6/9/2003	848421
MIK 152	Lode	4/5/2003	6/11/2003	N	564610	6/9/2003	848422
Mik Zero	Lode	3/15/2003	6/11/2003	N	564611	6/9/2003	848423
REX	Lode	3/15/2003	6/11/2003	N	564612	6/9/2003	848424
Doc Bartums Fraction	Lode			E			566256
Kendall Mt. #4	Lode			E			580780
Kendall Mt. #6	Lode			E			580781
Kendall Mt. #7	Lode			E			580782
Kendall Mt. #8	Lode			E			580783
Kendall Mt. #9	Lode			E			580784
Kendall Mt. #10	Lode			E			580785
Kendall Mt. #11	Lode			E			580786
Kendall Mt. #12	Lode			E			580787
Kendall Mt. #13	Lode			E			580788
Kendall Mt. #14	Lode			E			580789
Kendall Mt. #15	Lode			E			580790
Kendall Mt. #16	Lode			E			580791
Kendall Mt. #17	Lode			E			580792
Kendall Mt. #18	Lode			E			580793
LC #1	Lode			E			588088

Claim Name	Type	Loc Date	Record Date	Co	Bk	Pg	Inst. No.	Amend Date	Bk	Pg	Inst. No.	BLM Date	BLM No.
LC #2	Lode			E									588089
LC #3	Lode			E									588090
DF #1	Lode			E									588093
DF #2	Lode			E									588094
Kendall Mt. #25	Lode			E									588097
Kendall Mt. #26	Lode			E									588098
Kendall Mt. #27	Lode			E									588099
Kendall Mt. #28	Lode			E									588100
Kendall Mt. #29	Lode			E									588101
Wash #1	Lode			E									593871
Wash #2	Lode			E									593872
Wash #3	Lode			E									593873
CM #2	Lode			E									593875
CM #3	Lode			E									593876
CM #4	Lode			E									593877
CM #5	Lode			E									593878
CM #6	Lode			E									593879
CM #7	Lode			E									593880
CM #8	Lode			E									593881
CM #9	Lode			E									593882
Four Penny Fraction	Lode			E									661309
Nahure Fraction	Lode			E									661310
MW 3	Lode			E									692212
MW 4	Lode			E									692213
RH I	Lode			E									702136
RH 2	Lode			E									702137
RH 3	Lode			E									702138
RH 4	Lode			E									702139
RH 5	Lode			E									702140
Weight 1	Lode			E									708189
Weight 2	Lode			E									708190
Weight 3	Lode			E									708191
Weight 4	Lode			E									708192
Weight 5	Lode			E									708193
Weight 6	Lode			E									708194
Weight 7	Lode			E									708195
Weight 8	Lode			E									708196
Weight 9	Lode			E									708197
Weight 10	Lode			E									708198
Weight 11	Lode			E									708199
Weight 12	Lode			E									708200
Diamond 1	Lode			E									708217
Diamond 2	Lode			E									708218

Diamond 3	Lode	E							708219
Diamond 4	Lode	E							708220
Diamond 5	Lode	E							708221
Diamond 6	Lode	E							708222
Diamond 7	Lode	E							708223
Wedge Fraction Millsite	Lode	E							264053
Wedge Fraction	Lode	E							264054
Blackhawk #5	Placer	E	63	438	83065				205062
Blackhawk #7	Placer	E	63	440	83067				205064
Blackhawk #9	Placer	E	63	442	83069				205066
GFE #5	Lode	E	163	535	137590				642458
GFE #7	Lode	E	163	537	137592				642460
GFE #9	Lode	E	163	539	137594				642462
GFE # 11	Lode	E	163	541	137596				642464
GFE 54	Lode	E	167	333	139039				661352
GFE 55	Lode	E	167	334	139040				661353
GFE 56	Lode	E	167	335	139041				661354
GFE 57	Lode	E	167	336	139042				661355
GFE 63	Lode	E	167	338	139044				661357
GFE 64	Lode	E	167	339	139045				661358
GFE 65	Lode	E	167	380	139046				661359
GFE 66	Lode	E	167	341	139047	196	377	150786	661360
GFE 67	Lode	E	167	342	139048	196	378	150787	661361
GFE #77	Lode	E	170	192	139856				676455
GFE No. 1	Lode	E	170	444	140012				677716

Claim Name	Type	Loc Date	Record Date	Co	Bk	Pg	Inst. No.	Amend Date	Bk	Pg	Inst. No.	BLM Date	BLM No.
GFE No. 2	Lode			E	170	445	140013						677717
GFE No. 3	Lode			E	170	446	140014						677718
GFE No. 4	Lode			E	170	447	140015						677719
GFE No. 6	Lode			E	170	448	140016						677720
GFE No. 8	Lode			E	170	449	140017						677721
GFE No. 10	Lode			E	170	450	140018						677722
GFE No. 12	Lode			E	170	451	140019						677723
GFE No. 13	Lode			E	170	452	140020						677724
GFE No. 14	Lode			E	170	453	140021						677725
GFE No. 15	Lode			E	170	454	140022						677726
GFE No. 16	Lode			E	170	455	140023						677727
GFE No. 17	Lode			E	170	456	140024						677728
GFE No. 18	Lode			E	170	457	140025						677729
GFE No. 51	Lode			E	170	490	140058						677762
GFE No. 52	Lode			E	170	491	140059						677763
GFE No. 53	Lode			E	170	492	140060						677764
GFE No. 58	Lode			E	170	493	140061						677765
GFE No. 59	Lode			E	170	494	140062						677766
GFE No. 60	Lode	2/26/1993		E	170	495	140063	4/9/2003	218	182	157752	5/22/2003	677767
GFE No. 61	Lode	2/26/1993		E	170	496	140064	4/9/2003	218	184	152753	5/22/2003	677768
GFE No. 62	Lode	2/26/1993		E	170	497	140065	4/9/2003	218	186	152754	5/22/2003	677769
GFE No. 69	Lode			E	170	498	140067						677770
GFE No. 70	Lode			E	170	499	140068						677771
GFE No. 72	Lode			E	170	501	140069						677773
GFE No. 73	Lode			E	170	502	140070						677774
GFE No. 74	Lode			E	170	503	140071						677775
GFE No. 75	Lode			E	170	504	140072						677776
GFE No. 76	Lode			E	170	505	140073						677777
GFE No. 302	Lode			E	170	512	140080						677784
GFE No. 303	Lode			E	170	513	140081						677785
GFE No. 304	Lode			E	170	514	140082						677786
GFE No. 305	Lode			E	170	515	140083						677787
GFE No. 306	Lode			E	170	516	140084						677788
GFE No. 307	Lode			E	170	517	140085						677789
GFE No. 308	Lode			E	170	518	140086						677790
GFE No. 309	Lode			E	170	519	140087						677791
GFE No. 310	Lode			E	170	520	140088						677792
GFE No. 311	Lode			E	170	521	140089						677793
GFE No. 312	Lode			E	170	522	140090						677794
GFE-70A	Lode			E	174	380	141480						692090
GFE-74A	Lode			E	174	382	141482						692092
GFE-75A	Lode			E	174	383	141483						692093
GFE-76A	Lode			E	174	384	141484						692094
GFE-301	Lode			E	174	386	141486						692096

GFE-313	Lode		E	174	389	141489						692097
GFE-314	Lode		E	174	390	141490						692098
GFE-315	Lode		E	174	391	141491						692099
GFE-303A	Lode		E	174	387	141487						692100
GFE-304A	Lode		E	174	388	141488						692101
GFE-200	Lode	11/4/1993	E	175	4	141667	4/9/2003	218	198	157760	5/22/2003	693478
GFE-201	Lode	11/4/1993	E	175	5	141668	4/9/2003	218	200	157761	5/22/2003	693479
GFE-202	Lode	11/4/1993	E	175	6	141669	4/9/2003	218	202	157762	5/22/2003	693480
GFE-203	Lode		E	175	7	141670	4/9/2003	218	204	157763	5/22/2003	693481
GFE-204	Lode	11/4/1993	E	175	8	141671	4/9/2003	218	206	157764	5/22/2003	693482
GFE 68	Lode		E	176	186	142236						699705
GFE 500	Lode		E	176	187	142237						699706
GFE 501	Lode		E	176	188	142238						699707
GFE 781	Lode		E	176	189	1421240						699708
GFE 205	Lode		E	180	335	144239						717211
GFE 7A	Lode		E	195	299	150344						789766
GFE 9A	Lode		E	195	300	150345						789767
GFE 11A	Lode		E	195	301	150346						789768
GFE 206	Lode		E	195	302	150347						789769
GFE 306A	Lode		E	195	303	150348						789770
GFE 77A	Lode		E	196	383	150793						791777
Third Chance	Lode		E	191	330	148828						776189

GOLDFIELD PROJECT LEASES OWNED BY METALLIC GOLDFIELD INC.

LSE #	OWNER/LESSOR	LESSEE	DOCUMENT	DESCRIPTION	DATE	MEMO CO. REC. INST. #	MEMO CO. REC. DATE
1	EDWARD J. GORMAN, GEORGE & PATRICIA O'TOOLE (H&W), RICHARD & KATHERINE SCHWER, BRADLEY (H&W), & MICKALENE ESTRADA (H&W), PATRICK & STEPHANIE GORMAN (H&W).	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	BIG CHIEF, UNCLE SAM MS# 2292	1/13/1998	Inst# 152116 Bk 200/ Pg 345-354	8/17/1999
2	EDWARD & PATRICIA CHANDLER (H&W)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	TACOMA MS# 2573, JOSHUA MS# 2235	2/10/1998	Inst# 152117 Bk 200/ Pg 355-359	8/17/1999
3	BRUCE G. RODSKY	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	TOM HENRY MS# 2303, WHITE HORSE MS# 2231	2/25/1998	Inst# 152118 Bk 200/ Pg 360-363	8/17/1999
4	HOWARD K. & VIRGINIA R. PALMER (H&W) HEIRS TO THE ESTATES OF SAMUEL JACOB PALMER & ALBERT M. PALMER	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	BULL DOG FRACTION NO.2 MS# 2257	3/6/1998	Inst# 152120 Bk 200/ Pg 366-371	8/17/1999
5	SYLVIA BERLIN	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINERAL LEASE AGREEMENT WITH OPTION TO PURCHASE	PALACE MS# 2588, GOOD OLE SUMMERTIME MS# 2588, AQUA FRIA MS# 2684	4/20/1998	Inst# 152121 Bk 200/ Pg 372-375	8/17/1999

6	LOIS A. JENSEN LIVING TRUST DTD 12/12/94	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	KENDALL (S1/2) MS# 2397, SANDSTORM (N1/2) MS# 2407	3/30/1998	Inst# 152122 Bk 200/ Pg 376-380	8/17/1999
7	ROBERT & JUDY DREYER (H&W)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	ATHABASKA MS# 2354, BIG SIX MS# 2235, BIG SWEDE MS# 3882, BLUD RED MS# 3194, MS# 3443, DETROIT MS# 2234, JOSHAWAY MS# 2991, YELLOW TOP MS# 4100, SNOWDRIFT MS# 2273, SNOWDRIFT #2 MS# 2273, SPEARHEAD MS# 2838, ROSEBUSH MS# 2838, SUNNYSIDE #2 MS# 2811	5/7/1998	Inst# 152124 Bk 200/ Pg 386-390	8/17/1999

LSE #	OWNER/LESSOR	LESSEE	DOCUMENT	DESCRIPTION	DATE	MEMO. CO. REC. INST. #	MEMO. CO. REC. DATE
8	ROBERT & JUDY DREYER (H&W), RICHARD & PAULETTE SAEZ (H&W)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	ROSE MS# 2281, ROSE OF TRALEE MS# 2281, SNOWDRIFT #4 MS# 2273, SNOWDRIFT FRACTION MS# 2273, WONDERLODE FRACTION MS# 3283	5/7/1998	Inst# 152126 Bk 200/ Pg 394-399	8/17/1999
9	GOLDFIELD RESOURCES INC. (A NEVADA CORP.)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	SEE ATTACHED EXHIBIT A, PART 3A AND PART 3B. (362 unpatented claims; 149 patented claims)	8/1/1998	Inst# 151444 Bk 198/ Pg 298-308 (E) Inst# 458737(N)	12/8/98 (E) 12/11/98 (N)
10	GEORGE F. HERRMAN JR. & EDIA HERRMAN (H&W)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	SITES MS# 2690	3/16/1999	Inst# 152124 Bk 200/ Pg 386-390 (E)	8/17/1999
11	TNT NEVADA CORP.	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	BLUE BULL PROPERTY 29 PATENTED CLAIMS 5 UNPATENTED CLAIMS SEE EXHIBIT A PART 1A	5/4/1999 1st Am 3/23/01 2nd Am 4/24/02	Inst# 152111 Bk 200/ Pg 323-326 (E)	8/17/1999

LSE #	OWNER/LESSOR	LESSEE	DOCUMENT	DESCRIPTION	DATE	MEMO. CO. REC. INST. #	MEMO. CO. REC. DATE
12	TNT NEVADA CORP.	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	ADAMS PROPERTY 4 PATENTED CLAIMS 3 UNPATENTED CLAIMS SEE EXHIBIT A PART 1B	5/4/1999 1st Am 4/24/02	Inst# 152112 Bk 200/ Pg 327-330 (E)	8/17/1999
13	JOHNNIE MINING & MILLING	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	T2S R 42E, S13&24 3 PATENTED CLAIMS 4 UNPATENTED	3/1/2000		
14	LAUMEYER, NORMAN AND	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	T2S R 42E, S14,14,22,23 T2S,R43E,S20,21 8 PATENTED CLAIMS: Minerva, 2,3,4,5,6: MS# 3216; Denver: MS# 2267; Highland: MS# 3054	8/1/2003	Inst# 159595 Bk 225/ Pg 250-253A (E)	2/25/2004
15	EASTMAN, JEAN J. AND IRVING W., H&W	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	THANKSGIVING GIFT MS# 2210	7/23/1985	Doc#104569 B100/P251-2	8/22/1985
16	FEELEY, GLORIA M. (PROVOST)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	GOLDEN GATE MS # 2610	4/7/1984	Doc#99173 B90/P405-6	5/23/1984
17	JENNIFER M. LAWRENCE CATHY LAWRENCE (HEIRS OF JAMES T. HIRD)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	OREGON, ARGOSY MS# 2397	7/26/1984	Doc#101540 B94/P498-99	10/16/1984

LSE #	OWNER/LESSOR	LESSEE	DOCUMENT	DESCRIPTION	DATE	MEMO. CO. REC. INST.	MEMO. CO. REC. DATE
18	JENNIFER M. LAWRENCE CATHY LAWRENCE (HEIRS OF JAMES T. HIRD)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	RAMONA MS# 2620 MAGNOLIA MS# 2407	7/26/1984	Doc#101541 B94/P500501	10/16/1984
19	JAMES C. HARKEY (HEIR OF EDNA HUBBARD)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	TIGER MS# 2408; BIG LIZE MS# 2516; FIRST NATIONAL MS# 2246	4/19/1984	Doc#99172 B90/P403404	5/23/1984
20	DORIS M. HOGAN DONNA J. ALFREY ALICE L. DUNKEN (HEIRS TO LELA M. JONES)	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	GENERAL WASHINGTON #2 MS# 3016	4/12/1984	Doc#99171 B90/P401402	5/23/1984
21	GEORGE I. AND DOLORES PROVOST	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	VALLEY VIEW MS# 2265	3/7/1984	Doc#99170 B90/P399400	5/23/1984
22	MARILYN KLEVEN (HEIR TO CARL W. SCHIPP) JOHN L. SULLIVAN	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	UTAH, NEVADA BOY MS # 2392	4/10/1984	Doc#103078 B97/P419-20	3/13/1985
23	DAVID SCOTT SCHULTZ. (HEIR TO NORVAL C. SCHULTZ) AND SUZANNE SCHULTZ	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	WEDGE MS# 2983	4/6/1984	Doc#137970 B164/P543-4	4/28/1992
24	MARTIN AND MARGARET A. SHULER	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	BLACK ROCK MS# 2405	5/4/1984	Doc#99567 B91/P175-6	7/6/1984
25	HOWARD C. SMITH	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE WITH OPTION TO PURCHASE	HELENA MS# 2573	2/28/1984	Doc#99174 B90/P407-8	5/23/1984
26	ROBERT A. AND JEAN STANNARD	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	OLD GLORY NO. 1 MS# 2620	4/13/1984	Doc#137971 B164/P545-6	4/28/1992

27	BRYAN HINDMAN	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE AND OPTION TO PURCHASE	QUARTZITE 1,2 MS 2274	7/10/1989
28	EVANS VANDERGRIFT	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	LEASE AND OPTION TO PURCHASE OF MINING CLAIMS	GOLD COIN MS 2410 SADDLE ROCK MS 2379	7/29/1987 1st Am. 7/28/99
29	ANNE B. TRUEMAN	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE AND OPTION TO PURCHASE	BELMONT QUEEN MS 2332 BLACK HILLS NO.2 MS 2300 BONANZA MS 2682 GRANDMA MS 2236 NORTH STAR MS 2948	8/16/1989 1st Am 8/15/99
30	JOHN A. SWETE	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	NEW YORK NO. 2 MS 2243 ORIZABA MS 4077	3/27/1990 1st Am 3/26/00

LSE #	OWNER/LESSOR	LESSEE	DOCUMENT	DESCRIPTION	DATE	MEMO. CO. REC. INST.	MEMO. CO. REC. DATE
31	WAYNE AND SHIRLEY NELSON	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE AND OPTION TO PURCHASE	DAYBREAK MS 2824	9/28/1989		
32	ERNEST L. MCKEEVER, DONNA J. MCKEEVER, JOYCE L. MAUGLE	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	DIAMOND FRACTION MS 2529 HOLDUP MS 2529	3/27/1990 1st Am 3/26/00		
33	FRANK J. AND BARBARA L. CAPITANI	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE AND OPTION TO PURCHASE	BLACK ROCK MS# 2610 MISSOURI GRANDPA MS 2610	8/11/1989		
34	LOIS JENSEN	METALLIC GOLDFIELD INC., A NEVADA CORPORATION	MINING LEASE	DAISY 1,2,3 MS 2239	9/23/1987		

GOLDFIELD PROJECT: Mining Lease with Option To Purchase between TNT Nevada Corporation and Metallic Goldfield Inc.

The following patented and unpatented mining claims located in Township 2 South, Range 43 East, MDB&M, Section 31; Township 2 South, Range 42 East, MDB&M, Sections 25, 36; Township 3 South, Range 42 East, MDB&M, Sections 1, 2; Township 3 South, Range 43 East, MDB&M, Sections 5, 6, Esmeralda County, Nevada.

Patented Lode Claims

Claim Name	Mineral Survey #	Patent No.
Kaiser	2459	45303
Blue Bull	2690	46049
Pig	2690	46049
Iron Dike No. 1	2690	46049
Iron Dike No. 2	2690	46049
Kee	2690	46049
Hat	2690	46049
Stetson	2690	46049
Mary	2690	46049
Donkey Frac.	3127	277074
Crown	3838	279174
Potlatch	3838	279174
Mt. Hood	3838	279174
Victor	2258	45116
C.O.D.	2453	45339
Golden Eagle	2453	45339
Zoe	2453	45339
Butler	3839	272866
Lazy George	2228	43851
Examiner	2228	43851
Rams Horn	2355	44599
Morocco	2355	44599
Lucky Boy No. 1	2455	936718
Lucky Boy No. 2	2455	936718
Gold Bar	2403	45241
Charleston	4077	49589
Black Hawk	2273	44123
Spokane	2921	252715
Red Butte No. 5	2574	45956

Unpatented Lode Claims in Esmeralda Co., NV

Claim Name	Book	Page	BLM Serial No.	
Son I	87	517	NMC	298485
Son II & III	87	518	NMC	298486
Adam 5	104	492	NMC	364222
Adam 11	37	561	NMC	364223
Victor Fraction No. 1	106	244	NMC	372008

GOLDFIELD PROJECT: Mining Lease with Option To Purchase between TNT Nevada Corporation and Metallic Goldfield Inc.

The following patented and unpatented mining claims located in Township 2 South, Range 42:

East, MDB&M, Sections 24, 25, Esmeralda County, NV

Patented Lode Claims

Claim Name	Mineral Survey #
Monroe	2850
Jefferson	2850
Adams	2850
Gold Queen	2246

Unpatented Lode Claims

Location Certificate recorded in Esmeralda Co., NV

Claim Name	Book	Page	BLM Serial No.	
Adam 1	94	556	NMC	321538
Adam 2	94	557	NMC	321539
Adam 3	94	558	NMC	321540

GOLDFIELD PROJECT: Mining Lease between Johhnie Mining & Milling and Metallic Goldfield Inc.

Township 2 South Range 42 East, MDB&M, Sections 13 and 24, Esmeralda County, Nevada.

Unpatented Lode Mining Claims

Claim Name	Book	Page	BLM Serial No.
Midget No. 1	193	412	NMC 781824

Midget No. 2 193 413 NMC 781825 Midget No. 3 193 414 NMC 781826 Midget No. 4 193 415 NMC 781827

Patented Load Mineral Claims

Claim Name	Mineral Survey No.
Mineral Wealth 2	3105
Mineral Wealth 3	3105
Mineral Wealth 4	3105

GOLDFIELD PROJECT
PATENTED MINING CLAIMS OWNED BY GOLDFIELD RESOURCES INC.
LEASED TO METALLIC GOLDFIELD INC.
Esmeralda and Nye Counties, Nevada

CLAIM NAME	MS. #	CLAIM NAME	MS. #
Moose	2501	Transit	3119
Gem	2501	Lightning	3310
Reliance	2677	Midas	3081
Alvarado	2677	Peerless	3083
Lincoln	2677	Cake 1	3562
Rose	2677	Cake 2	3562
Piute	2677	Cake 3	3562
Tom Boy	3159	Cake 4	3562
Blue Guage	3276	Buzzard	3014
Occidental	3276	Strother	3014
Oro	3276	Hudson	4183
Highland	3276	Midnight	4183
Yellow Aster	3276	Excelsior	4183
Revenue	3217	Sorrell Pony	4131
Eclipse	3217	Utah 6	4131
Whippowill 1	2713	Cairo	3972
Whippowill 2	2713	Eagle	3973
Whippowill 3	2713	Lone Star	2330
Transvaal	2327	Texas	2330
Kimberly	2327	Jupiter	2352
Julia	2327	Ida May	2352
Tramp Fraction	3442	Peerless 1	2432
Hoboe 1	3442	Peerless 2	2432
Black Cap	2909	Windsor 2	2441
Black Cap 1	2909	Republic	2441
Black Cap 2	2909	Pointer 1	2441
Black Cap 3	2909	Nightingale 1	2443
Ajax	3371	Independence	2465
Ajax 2	3371	Berlin 1	2524
Ajax 3	3371	Berlin 2	2524
Congo	2955	Alta	2641
Johannesburg	2955	Panyan	2641
Wykikukym	2955	Kanavaugh 1	2920
Sacajawea	2955	Kanavaugh 2	2920
Kavanaugh 3	2920	Native Daughter	2367
Kavanaugh 4	2920	Native Son	2367
Mascot	3493	Sunset	2367
Brand	3335	Red Rock 1	2367
Hombre	3184	Red Rock 2	2367
Seniorita	3184	Red Rock 3	2367
Mintey 4	2339	Red Rock 4	2367
Alice	3488	Fissure 1	2388
Goldfield Blizzard	3488	Fissure 2	2388
Third Chance	3488	Fissure 3	2388
Snow Storm	3488	Fissure 4	2388

CLAIM NAME	MS. #	CLAIM NAME	MS. #
Lou Dillion	3488	B. C. Fraction	2388
Big Jack 1	2967	Porphyry	2388
Big Jack 2	2967	Last Chance	2388
Londonberry	3249	Dexter	2388
Mayflower	2967	Cumberland Fraction	2388
Williams	2967	Broad gage 1	2796
Crown Point Fraction	3944	Flat	2796
Rialto	3460	Amboy	2796
Frontenac	3460	Queen	2953
Air Scout	4712	Spider	3107
Air Scout 1	4712	Spider 1	3108
Air Scout 2	4712	Big Dyke	3101
Coliseum	3943	Bullion	3101
Frances 1	2814	Siwash	3101
Frances 2	2814	Peerless	2432
James	2814	Morning Star	3131
Frances Group 3	3295	Milwaukee	3282
Frances Group 4	3295	August	3548
Frances Group 5	3295	Sandwich	3548
Frances Group 6	3295	Jones	3548
Frances Fraction	3295	Little Joe	2953
Nightingale 2	2443	King	2953
Nightingale 3	2443	Corinth	2485
Mississippi 6	3442	Berlin	2524
Mississippi 7	3442		
Jupiter (5/6 interest)	2352		
Vulcan	2352		
Ruby 1	3182		
Ruby 2	3182		
Ruby 3	3182		
Ruby 4	3182		
Ruby 5	3182		
Lookout	2310		
Bluebird	2310		
Hooker	2310		

GOLDFIELD PROJECT
UNPATENTED MINING CLAIMS OWNED BY GOLDFIELD RESOURCES INC. LEASED TO METALLIC GOLDFIELD INC.
Esmeralda (E) and Nye (N) Counties, Nevada

CLAIM NAME	NMC #	COUNTY
Bob 5	16928	N
Black Cap Fraction	16930	N
Eve Fraction	22456	N
Bob 1	56343	N
Navajo 1	56403	N
Navajo 2	56404	N
Davenport 1	56409	N
Davenport 2	56410	N
Federal Grant	56411	N
Federal Grant 1	56412	N
Cat Ext. 1	56413	N
Cat Ext. 2	56414	N
Cat Ext. 3	56415	N
Cat Ext. 4	56416	N
Cat Ext. 5	56417	N
Bob 9	56420	N
Bob 10	56421	N
Bob 11	56422	N
Bob 12	56423	N
Bob 13	56424	N
Bob 14	56425	N
Bob 15	56426	N
Bob 16	56427	N
Lily 21	56428	N
Lily 24	56431	N
Lily 27	56434	N
Lily 28	56435	N
Lily 34	56440	N
Lily 35	56441	N
Lily 36	56442	N
Lily 37	56443	N
Lily 38	56444	N
Navajo 3	56451	N
Mouse (amended)	56460	N
Mouse 1 (amended)	56461	N
Mouse Fraction (amended)	56462	N
Piute 1	56464	N
Piute 2	56465	N
Piute 3	56466	N
Oyster Ext.	56467	N
Tom Boy Ext. (amended)	56468	N
Big Dyke 1	56469	N
Big Dyke 2	56470	N

CLAIM NAME	NMC #	COUNTY
Big Dyke 3	56471	N
Big Dyke 4	56472	N
Big Dyke 5	56473	N
Investor (amended)	56474	N
Investor 1	56475	N
Investor 4	56476	N
Investor 6	56477	N
Investor 7	56478	N
Ida 5	56479	N
Ida 6	56480	N
Lily 1	56481	N
Lily 2	56482	N
Lily 3	56483	N
Lily 4	56484	N
Lily 5	56485	N
Lily 6	56486	N
Lily 7	56487	N
Lily 8	56488	N
Lily 9	56489	N
Lily 10	56490	N
Lily 11	56491	N
Lily 12	56492	N
Lily 14	56493	N
Lily 15	56494	N
Lily 16	56495	N
Lily 17	56496	N
Lily 18	56497	N
Lily 19	56498	N
Lily 20	56499	N
Key 1	56508	N
Key 2	56509	N
Key 3	56510	N
Key 4	56511	N
Key 5	56512	N
Wing	56513	N
Owl 1	56514	N
Owl 2	56515	N
Owl 3	56516	N
Owl 4	56517	N
Owl 5	56518	N
Owl 6	56519	N
Eve 1	56520	N
Eve 2	56521	N
Eve 3	56522	N
Eve 4	56523	N
Eve 5	56524	N
Eve 6	56525	N
Eve Ext. (amended)	56526	N
Eve Ext. 1 (amended)	56527	N
Eve Ext. 2 (amended)	56528	N

CLAIM NAME	NMC #	COUNTY
Eve Ext. 3 (amended)	56529	N
Bell 1	56534	N
Bell 2	56535	N
Bell 3	56536	N
Big Bell	56537	N
Bell Ext.	56538	N
Cat 3	56541	N
Cat 4	56542	N
Cat 5	56543	N
Cat 6	56544	N
Cat 7	56545	N
Cat 10	56548	N
Cat 11	56549	N
Bob Fraction (amended)	56550	N
Ida Fraction (amended)	56551	N
Cy 2	56552	N
Cy 3	56553	N
Cy 16	56565	N
Doctor	56581	N & E
RFC	56592	E
RFC 1	56593	E
RFC 2	56594	E
St. Patrick	56599	E
St. Patrick 1	56600	N & E
St. Patrick 2	56601	E
Silver Bell 1 (amended)	56603	E
Haunch Bell 8	56604	E
Linda Fraction	56606	E
Linda	56607	E
Linda 1	56608	E
Linda 3	56610	E
Linda 5	56611	E
Linda 6	56612	E
Linda 7	56613	E
Linda 8	56614	E
Linda 14	56616	E
Linda 15	56617	E
Linda 16	56618	E
Cycle (amended)	56622	E
Cycle I (amended)	56623	E
Vulcan Fraction	56625	E
DOT (amended)	56626	E
Mono	56627	E
Mono 1	56628	E
New Deal	56629	N
New Deal 1	56630	N
New Deal 2	56631	N
New Deal 4	56632	N
Berlin Ext.	56633	N
Windsor Ext. (amended	56634	N

CLAIM NAME	NMC #	COUNTY
Alvarado Fraction (amnd)	56635	N
Independence Ext. (amnd)	56636	N
Cycle Fraction (amended)	56637	N & E
Moose Fraction	56638	N
Duffy (amended)	56639	N
Congo Fraction (amended)	56640	N
Oyster	56641	N
Maud S.	56642	N
Brilliant	56643	N
Cairo 1 (amended)	56644	N
Cairo Ext. (amended)	56645	N
Piute Ext.	56646	N
Investor 2	56695	N
Investor 3	56696	N
Investor 5	56697	N
Investor 8	56698	N
Pointer	56699	N
Pointer 2	56700	N
Pointer Ext.	56701	N
Ida 2	56702	N & E
Ida 3	56703	N
Ida 4	56704	N
Ida 7	56705	N
Cake 4 Ext.	56706	N
Cake 3 Ext.	56707	N
Rat 1 (amended)	56708	N
Rat 2	56709	N
Rat 3	56710	N
Rat 4 (amended)	56711	N
Rat 5	56712	N
Rat 6	56713	N
Rat 7 (amended)	56714	N
Paul 1	56716	N
Paul 2	56717	N
Paul 3	56718	N
Paul 4	56719	N
Paul 5	56720	N
Paul 6	56721	N
Boy	81817	N & E
Bob 3	81818	N
Bob 4	81819	N
Bob 6	81820	N
Rose Fraction	81821	N
Midget 1	81822	E
Midget 2	81823	N
Midget 3	81824	N
Silver Bell 2	81825	E
Silver Bell 3	81826	E
Hurley 1	81827	E
Gale 1	81830	N & E

CLAIM NAME	NMC #	COUNTY
Linda 4 (amended)	81831	E
Linda 9 (amended)	81832	E
Linda 17	81835	E
Bird	81837	N
Gale 2	81838	N
Alice Fraction (amnd)	157535	E
Ruby Fraction	354766	E
Linda 2	354767	E
Tar Fraction	361697	N
Tac 1	361699	N
Tac 2	361700	N
Tac 3	361701	N
PGF No. 2	631634	N
PGF No. 3	631635	N
PGF No. 4	631636	N
PGF No. 5	631637	N
PGF No. 6	631638	E
PGF No. 7	631639	E
PGF No. 8	631640	E
PGF No. 9	631641	E
PGF No. 10	631642	E
PGF No. 11	631643	N
PGF No. 12	631644	N
PGF No. 13	631645	N
PGF No. 16	631647	E
PGF No. 17	631648	E
PGF No. 18	631649	E
Burk 1-Burk 61	710419-710479	N
Burk 63-Burk 102	716687-716726	N
Peerless Ext.	792473	N
Pointer 3	792472	N
CAT 8	792471	N
GFR 1-11	793447-793457	N
GFR 13-19	793458-793464	N
GFR 22	793465	N
GFR 23	793466	N
GFR 26	793467	N
GFR 27	793468	N
Lady Eugenia No.1	801590	E
Lady Eugenia No.2	801591	E
Lady Eugenia No.3	801592	E
Pipe Steam No.1	801593	E
Pipe Steam No.2	801594	E
Pipe Steam No.3	801595	E
Pipe Steam No.4	801596	E
Mik No.155	801597	E
Humbolt	801598	E
Ruby	801599	E
Silver Bell	801600	E
Mik No.153	801601	N

CLAIM NAME	NMC #	COUNTY
Peerless No.3	801602	N
Knight	801603	N
Wickiup	801604	N
Bob-1113	801605	N

Appendix B

SIGNIFICANT ASSAY COMPOSITES

Gemfield Significant Assays

BHID	FROM	TO	AU_OPT
GEM-007	85.80	105.80	0.01
GEM-007	105.80	125.80	0.023
GEM-007	125.80	145.80	0.012
GEM-007	145.80	165.80	0.014
GEM-009	133.10	153.10	0.01
GEM-009	153.10	173.10	0.01
GEM-010	152.40	172.40	0.016
GEM-010	172.40	192.40	0.021
GEM-011	30.71	41.10	0.014
GEM-011	41.10	61.10	0.014
GEM-011	81.10	101.10	0.012
GEM-014	69.28	92.38	0.023
GEM-014	92.38	115.47	0.028
GEM-014	115.47	138.56	0.025
GEM-014	138.56	161.66	0.079
GEM-014	161.66	184.75	0.034
GEM-014	184.75	207.85	0.011
GEM-014	230.94	254.03	0.011
GEM-014	254.03	277.13	0.012
GEM-015	89.95	113.05	0.014
GEM-015	113.05	136.14	0.022
GEM-015	136.14	159.23	0.073
GEM-015	159.23	182.33	0.017
GEM-015	182.33	205.42	0.019
GEM-015	205.42	228.52	0.044
GEM-015	228.52	251.61	0.012
GEM-016	147.22	170.32	0.018
GEM-016	170.32	193.41	0.014
GEM-016	216.51	239.60	0.012
GEM-016	239.60	262.69	0.018
GEM-018	491.90	498.52	0.013
GEM-018	498.52	511.90	0.023
GEM-018	511.90	531.90	0.038
GEM-018	531.90	551.90	0.023
GEM-018	551.90	571.90	0.019
GEM-018	611.90	631.90	0.04
GEM-018	631.90	651.90	0.15
GEM-018	651.90	671.90	0.083
GEM-018	671.90	691.90	0.065
GEM-018	691.90	700.00	0.025
GEM-019	30.60	53.69	0.01
GEM-019	76.79	99.88	0.012
GEM-019	146.07	169.16	0.011
GEM-019	169.16	192.26	0.015
GEM-019	192.26	215.35	0.012
GEM-021	232.20	252.20	0.015
GEM-022	48.50	68.50	0.019
GEM-022	68.50	88.50	0.019
GEM-022	88.50	108.50	0.012
GEM-022	148.50	168.50	0.012
GEM-022	188.50	208.50	0.011

BHID	FROM	TO	AU_OPT
GEM-023	56.812	79.906	0.021
GEM-023	79.906	103	0.025
GEM-023	103	126.094	0.013
GEM-023	126.094	149.188	0.022
GEM-025	204.266	227.36	0.01
GEM-025	342.83	365.924	0.011
GEM-026	277.2	297.2	0.048
GEM-026	297.2	317.2	0.041
GEM-026	317.2	337.2	0.01
GEM-028	672.8	692.8	0.011
GEM-028	692.8	712.8	0.031
GEM-028	712.8	732.8	0.013
GEM-028	732.8	742.396	0.02
GEM-030	576.418	593.6	0.026
GEM-030	593.6	613.6	0.051
GEM-030	613.6	633.6	0.037
GEM-030	633.6	636.236	0.02
GEM-033	100.459	123.553	0.02
GEM-033	123.553	146.647	0.089
GEM-035	112.468	135.562	0.013
GEM-036	92.376	115.47	0.021
GEM-036	115.47	138.564	0.015
GEM-036	138.564	161.658	0.016
GEM-036	254.034	277.128	0.01
GEM-036	277.128	300.222	0.016
GEM-037	23.045	46.072	0.064
GEM-037	69.166	92.26	0.01
GEM-037	115.354	138.448	0.013
GEM-037	138.448	161.542	0.017
GEM-037	161.543	184.637	0.01
GEM-037	184.637	207.731	0.013
GEM-037	207.731	230.825	0.011
GEM-037	230.825	253.919	0.017
GEM-037	253.919	277.013	0.021
GEM-037	277.013	300	0.011
GEM-038	428.6	448.6	0.03
GEM-038	448.6	468.6	0.059
GEM-038	468.6	488.6	0.011
GEM-038	508.6	528.6	0.011
GEM-038	528.6	548.6	0.191
GEM-038	548.6	568.6	0.522
GEM-038	568.6	588.6	0.29
GEM-038	588.6	608.6	0.118
GEM-038	608.6	628.6	0.043
GEM-038	628.6	648.6	0.052
GEM-039	465.8	485.8	0.019
GEM-039	505.8	525.8	0.015
GEM-039	565.8	585.8	0.01
GEM-039	594.834	605.8	0.01
GEM-040	490.2	510.2	0.032
GEM-040	510.2	530.2	0.012

BHID	FROM	TO	AU_OPT
GEM-040	530.20	550.20	0.02
GEM-040	610.20	630.20	0.01
GEM-040	630.20	650.20	0.031
GEM-040	650.20	670.20	0.013
GEM-040	670.20	689.13	0.032
GEM-040	689.13	690.20	0.04
GEM-041	507.80	527.80	0.012
GEM-041	547.80	567.80	0.011
GEM-041	567.80	587.80	0.035
GEM-041	587.80	607.80	0.011
GEM-041	607.80	627.80	0.011
GEM-043	121.80	141.80	0.017
GEM-043	141.80	161.80	0.049
GEM-043	161.80	181.80	0.019
GEM-045	314.80	334.80	0.013
GEM-045	334.80	354.80	0.01
GEM-046	395.20	415.20	0.023
GEM-046	415.20	435.20	0.013
GEM-046	435.20	455.20	0.077
GEM-046	455.20	475.20	0.011
GEM-047	79.81	102.67	0.33
GEM-047	102.67	125.54	0.035
GEM-047	125.54	148.41	0.016
GEM-048	90.80	110.80	0.011
GEM-048	110.80	130.80	0.022
GEM-048	130.80	150.80	0.01
GEM-048	150.80	170.80	0.012
GEM-050	64.80	84.80	0.02
GEM-050	84.80	104.80	0.014
GEM-050	124.80	144.80	0.017
GEM-050	144.80	164.80	0.071
GEM-050	164.80	184.80	0.031
GEM-050	184.80	204.80	0.04
GEM-050	204.80	224.80	0.015
GEM-050	264.80	284.80	0.026
GEM-051	349.20	369.20	0.02
GEM-051	369.20	389.20	0.018
GEM-051	429.20	449.20	0.048
GEM-051	469.20	489.20	0.074
GEM-051	489.20	509.20	0.091
GEM-051	509.20	529.20	0.013
GEM-051	529.20	549.20	0.105
GEM-051	549.20	569.20	0.218
GEM-051	569.20	589.20	0.037
GEM-055	118.24	141.34	0.011
GEM-056	179.60	199.60	0.01
GEM-056	199.60	219.60	0.023
GEM-056	219.60	239.60	0.109
GEM-056	239.60	259.60	0.04
GEM-057	84.90	104.90	0.022
GEM-057	104.90	124.90	0.012

BHID	FROM	TO	AU_OPT
GEM-059	366.7	386.7	0.017
GEM-059	466.7	486.7	0.01
GEM-059	486.7	506.7	0.023
GEM-059	506.7	526.7	0.189
GEM-059	526.7	546.7	0.166
GEM-059	546.7	566.7	0.044
GEM-061	428.1	448.1	0.02
GEM-061	528.1	548.1	0.017
GEM-061	548.1	568.1	0.052
GEM-061	568.1	588.1	0.013
GEM-062	310.9	330.9	0.019
GEM-062	330.9	350.9	0.012
GEM-062	530.9	550.9	0.011
GEM-063	276.668	291.7	0.022
GEM-063	291.7	311.7	0.011
GEM-063	311.7	331.7	0.011
GEM-064	177.7	186.924	0.011
GEM-064	186.924	197.7	0.013
GEM-064	197.7	217.7	0.028
GEM-064	217.7	237.7	0.031
GEM-064	237.7	257.7	0.034
GEM-064	297.7	317.7	0.014
GEM-064	317.7	337.7	0.015
GEM-066	133.7	153.7	0.011
GEM-066	153.7	173.7	0.011
GEM-067	168.83	177.7	0.058
GEM-067	177.7	197.7	0.019
GEM-068	359.7	379.7	0.123
GEM-068	379.7	399.7	0.098
GEM-068	399.7	419.7	0.012
GEM-068	439.7	459.7	0.013
GEM-068	479.7	499.7	0.01
GEM-069	369.7	389.7	0.011
GEM-070	382.7	402.7	0.02
GEM-070	402.7	422.7	0.031
GEM-070	422.7	442.7	0.085
GEM-070	442.7	462.7	0.368
GEM-070	462.7	482.7	0.594
GEM-071	133	153	0.01
GEM-072	196.371	215.3	0.015
GEM-072	215.3	235.3	0.013
GEM-072	235.3	255.3	0.023
GEM-072	255.3	275.3	0.025
GEM-072	275.3	295.3	0.023
GEM-072	295.3	315.3	0.025
GEM-073	105.913	117.6	0.064
GEM-073	117.6	137.6	0.159
GEM-073	137.6	157.6	0.018
GEM-073	157.6	177.6	0.011
GEM-073	197.6	217.6	0.012
GEM-073	217.6	237.6	0.011

BHID	FROM	TO	AU_OPT
GEM-074	202.60	210.06	0.013
GEM-074	210.06	222.60	0.01
GEM-074	302.60	322.60	0.017
GEM-075	155.30	165.66	0.03
GEM-075	165.66	175.30	0.025
GEM-075	175.30	195.30	0.055
GEM-075	235.30	255.30	0.015
GEM-075	255.30	275.30	0.016
GEM-075	275.30	295.30	0.012
GEM-075	295.30	315.30	0.017
GEM-075	315.30	335.30	0.01
GEM-075	335.30	355.30	0.01
GEM-075	355.30	375.30	0.014
GEM-075	455.30	471.57	0.011
GEM-076	378.70	398.70	0.013
GEM-076	398.70	418.70	0.037
GEM-076	418.70	438.70	0.018
GEM-076	478.70	498.70	0.02
GEM-076	498.70	515.43	0.013
GEM-077	209.70	229.70	0.015
GEM-077	249.70	269.70	0.012
GEM-079	358.10	378.10	0.022
GEM-079	378.10	398.10	0.024
GEM-080	93.30	113.30	0.028
GEM-080	133.30	153.30	0.017
GEM-080	153.30	173.30	0.013
GEM-081	422.80	442.80	0.01
GEM-082	59.20	79.20	0.021
GEM-082	79.20	99.20	0.207
GEM-082	99.20	119.20	0.09
GEM-082	119.20	139.20	0.019
GEM-083	446.80	466.80	0.018
GEM-083	466.80	486.80	0.028
GEM-083	486.80	506.80	0.024
GEM-083	506.80	526.80	0.01
GEM-083	546.80	566.80	0.029
GEM-083	566.80	573.02	0.01
GEM-085	27.90	47.90	0.01
GEM-085	67.90	87.90	0.02
GEM-087	221.60	241.60	0.034
GEM-087	241.60	261.60	0.015
GEM-088	49.80	69.80	0.017
GEM-088	69.80	89.80	0.079
GEM-088	89.80	109.80	0.043
GEM-088	109.80	129.80	0.08
GEM-088	129.80	149.80	0.162
GEM-088	149.80	169.80	0.048
GEM-088	209.80	229.80	0.054
GEM-092	273.50	293.50	0.01
GEM-096	146.30	166.30	0.017
GEM-096	166.30	186.30	0.01

BHID	FROM	TO	AU_OPT
GEM-096	346.3	366.3	0.053
GEM-097	54	74	0.01
GEM-097	174	194	0.016
GEM-098	146.075	172.183	0.054
GEM-098	172.183	198.291	0.023
GEM-098	198.291	224.399	0.011
GEM-098	224.4	250.508	0.023
GEM-098	250.508	276.616	0.023
GEM-098	276.616	302.724	0.043
GEM-098	302.724	328.832	0.193
GEM-098	328.832	354.94	0.064
GEM-098	354.94	381.048	0.051
GEM-098	381.048	407.156	0.048
GEM-098	407.157	433.265	0.046
GEM-099	297.5	317.5	0.011
GEM-099	397.5	417.5	0.027
GEM-100	62.921	89.029	0.01
GEM-100	141.245	167.353	0.011
GEM-100	167.354	193.462	0.01
GEM-100	219.57	245.678	0.011
GEM-102	59.626	86.126	0.019
GEM-102	86.126	112.626	0.023
GEM-102	112.626	139.126	0.033
GEM-102	139.127	165.627	0.033
GEM-102	457.13	483.63	0.01
GEM-103	254.3	274.3	0.014
GEM-104	189.284	215.392	0.023
GEM-104	215.392	241.5	0.026
GEM-104	241.5	267.608	0.059
GEM-104	267.609	293.717	0.017
GEM-104	293.717	319.825	0.039
GEM-106	99.081	116.737	0.011
GEM-106	116.737	124.816	0.01
GEM-106	124.816	150.551	0.036
GEM-106	150.551	176.286	0.025
GEM-106	176.286	202.021	0.024
GEM-106	202.021	227.756	0.016
GEM-106	227.757	253.492	0.107
GEM-106	253.492	279.227	0.079
GEM-106	279.227	304.962	0.108
GEM-106	304.962	330.697	0.022
GEM-106	356.433	382.168	0.015
GEM-106	382.168	407.903	0.156
GEM-106	407.903	433.638	0.146
GEM-108	249.794	263.562	0.016
GEM-108	263.562	289.67	0.011
GEM-108	289.67	315.778	0.021
GEM-108	315.778	341.886	0.109
GEM-108	341.886	367.994	0.045
GEM-108	367.994	394.102	0.01
GEM-108	394.102	420.21	0.029

BHID	FROM	TO	AU_OPT	BHID	FROM	TO	AU_OPT
GEM-108	420.21	446.32	0.011	GEM-120	293.978	320.086	0.038
GEM-108	446.32	472.43	0.011	GEM-120	320.086	346.194	0.036
GEM-109	251.42	277.53	0.013	GEM-120	346.194	372.302	0.049
GEM-109	277.53	303.64	0.014	GEM-120	372.303	398.411	0.045
GEM-109	303.64	329.75	0.01	GEM-120	398.411	424.519	0.015
GEM-109	381.96	408.07	0.01	GEM-121	147.773	173.881	0.029
GEM-110	134.07	160.17	0.04	GEM-121	173.881	199.989	0.014
GEM-110	160.17	186.28	0.024	GEM-121	199.989	226.097	0.242
GEM-111	121.93	148.03	0.011	GEM-121	226.097	252.205	0.01
GEM-111	148.03	174.14	0.01	GEM-121	252.205	278.313	0.019
GEM-111	174.14	200.25	0.013	GEM-121	278.313	304.421	0.012
GEM-111	200.25	226.36	0.011	GEM-121	304.421	330.529	0.02
GEM-112	118.27	144.38	0.011	GEM-121	330.53	356.638	0.019
GEM-112	144.38	170.49	0.022	GEM-122	515.057	539.713	0.028
GEM-112	170.49	196.59	0.03	GEM-122	539.712	561.243	0.052
GEM-112	196.60	222.70	0.094	GEM-122	561.243	564.35	0.01
GEM-112	222.70	248.81	0.069	GEM-126	65.1	85.1	0.011
GEM-112	297.29	301.03	0.015	GEM-126	225.1	245.1	0.01
GEM-115	85.24	111.35	0.025	GEM-128	39.624	66.217	0.057
GEM-115	111.35	137.46	0.027	GEM-128	66.217	92.735	0.016
GEM-117	185.87	209.03	0.021	GEM-128	145.552	171.85	0.01
GEM-117	209.03	232.28	0.018	GEM-128	171.85	198.103	0.011
GEM-117	255.75	279.32	0.043	GEM-128	198.103	224.35	0.019
GEM-117	279.32	303.33	0.037	GEM-128	224.351	250.701	0.033
GEM-117	327.37	351.76	0.018	GEM-128	250.7	277.023	0.013
GEM-117	351.76	376.16	0.101	GEM-129	19.582	43.958	0.012
GEM-117	376.16	400.55	0.047	GEM-129	43.958	70.519	0.01
GEM-117	400.55	424.94	0.021	GEM-129	97.164	123.827	0.01
GEM-117	424.94	449.33	0.079	GEM-129	123.828	150.774	0.01
GEM-117	449.33	473.72	0.057	GEM-130	233.522	258.581	0.01
GEM-117	473.72	498.11	0.017	GEM-130	258.581	283.565	0.016
GEM-118	55.41	70.31	0.01	GEM-130	283.564	308.406	0.029
GEM-118	70.31	95.92	0.036	GEM-130	308.407	333	0.014
GEM-118	95.92	121.53	0.055	GEM-131	473.933	498.615	0.022
GEM-118	121.53	147.44	0.014	GEM-131	498.615	523.333	0.013
GEM-118	173.40	199.77	0.03	GEM-131	523.333	548.057	0.013
GEM-118	199.77	226.16	0.013	GEM-131	548.058	572.782	0.118
GEM-118	226.16	252.54	0.024	GEM-131	597.713	622.664	0.089
GEM-118	252.54	278.89	0.079	GEM-131	622.663	647.877	0.167
GEM-118	278.89	305.00	0.013	GEM-132	587.255	607.255	0.015
GEM-118	305.00	331.08	0.081	GEM-132	627.255	647.255	0.03
GEM-118	331.08	357.04	0.293	GEM-132	647.255	667.255	0.011
GEM-118	357.04	382.94	0.076	GEM-132	687.255	707.255	0.04
GEM-118	382.94	408.66	0.201	GEM-132	707.255	727.255	0.146
GEM-119	330.05	354.83	0.025	GEM-132	727.255	747.255	0.017
GEM-119	354.83	379.61	0.03	GEM-133	180.672	205.791	0.011
GEM-119	404.40	429.18	0.032	GEM-133	205.791	230.878	0.261
GEM-120	137.33	163.44	0.015	GEM-133	230.878	255.862	0.897
GEM-120	215.65	241.76	0.028	GEM-133	255.862	280.727	0.12
GEM-120	241.76	267.87	0.027	GEM-133	280.728	305.206	0.027
GEM-120	267.87	293.98	0.076	GEM-133	305.206	329.69	0.016

BHID	FROM	TO	AU_OPT
GEM-133	329.69	354.20	0.02
GEM-133	354.20	378.67	0.014
GEM-133	378.67	402.94	0.014
GEM-134	115.86	141.52	0.01
GEM-134	141.52	167.04	0.023
GEM-134	167.04	192.35	0.027
GEM-134	192.35	217.57	0.056
GEM-134	217.57	243.01	0.019
GEM-134	243.01	268.55	0.08
GEM-134	268.55	294.16	0.149
GEM-134	319.76	345.36	0.012
GEM-134	370.96	396.57	0.013
GEM-134	422.20	447.82	0.017
GEM-134	447.82	473.45	0.01
GEM-134	494.93	499.08	0.049
GEM-134	499.08	499.90	0.05
GEM-134	499.90	500.00	0.05
GEM-136	93.60	119.71	0.014
GEM-136	145.81	171.92	0.059
GEM-136	171.92	198.03	0.018
GEM-136	198.03	224.14	0.014
GEM-138	154.82	180.93	0.012
GEM-138	259.25	285.36	0.016
GEM-139	237.06	263.17	0.01
GEM-139	263.17	289.28	0.012
GEM-139	289.28	315.39	0.013
GEM-139	341.50	367.60	0.014
GEM-139	367.60	393.71	0.018
GEM-140	315.13	341.23	0.01
GEM-140	523.99	550.10	0.01
GEM-141	246.20	272.31	0.013
GEM-142	423.87	449.97	0.013
GEM-144	704.20	724.20	0.01
GEM-144	724.20	744.20	0.099
GEM-144	744.20	764.20	0.017
GEM-144	764.20	784.20	0.013
GEM-144	784.20	804.20	0.03
GEM-145	258.60	284.71	0.017
GEM-145	336.93	363.03	0.01
GEM-146	134.07	160.17	0.037
GEM-146	160.17	186.28	0.044
GEM-146	186.28	212.39	0.037
GEM-146	212.39	238.50	0.077
GEM-146	238.50	264.61	0.02
GEM-147	221.96	238.24	0.017
GEM-148	405.98	432.09	0.012
GEM-148	432.09	458.20	0.01
GEM-149	469.03	495.14	0.015
GEM-150	570.46	596.57	0.013
GEM-151	686.70	706.70	0.021
GEM-151	706.70	726.70	0.023

BHID	FROM	TO	AU_OPT
GEM-151	726.7	746.7	0.021
GEM-151	746.7	766.7	0.035
GEM-151	766.7	786.7	0.017
GEM-151	786.7	806.7	0.04
GEM-151	826.7	846.7	0.034
GEM-151	846.7	866.7	0.01
GEM-151	866.7	886.7	0.016
GEM-156	132.045	152.045	0.01
GEM-156	212.045	232.045	0.011
GEM-156	272.045	292.045	0.019
GEM-156	292.045	312.045	0.043
GEM-156	312.045	332.045	0.053
GEM-156	332.045	352.045	0.089
GEM-156	352.045	372.045	0.062
GEM-156	372.045	392.045	0.028
GEM-156	432.045	452.045	0.019
GEM-156	672.045	674.711	0.01
GEM-157	76.492	96.492	0.024
GEM-157	136.492	156.492	0.013
GEM-157	156.492	176.492	0.011
GEM-157	336.492	356.492	0.017
GEM-157	356.492	376.492	0.033
GEM-157	376.492	396.492	0.02
GEM-157	396.492	416.492	0.086
GEM-157	416.492	436.492	0.088
GEM-157	436.492	456.492	0.058
GEM-157	456.492	476.492	0.069
GEM-157	476.492	496.492	0.052
GEM-157	496.492	516.492	0.093
GEM-157	516.492	536.492	0.284
GEM-157	536.492	556.492	0.26
GEM-157	556.492	576.492	0.396
GEM-157	576.492	596.492	0.355
GEM-157	596.492	616.492	0.262
GEM-157	616.492	636.492	0.47
GEM-162	1123.9	1143.9	0.01
GEM-167	96.33501	116.342	0.046
GEM-167	116.342	136.349	0.045
GEM-167	136.348	156.354	0.059
GEM-167	156.355	176.359	0.015
GEM-168	181.407	201.409	0.021
GEM-168	201.409	221.414	0.021
GEM-169	103.991	124.028	0.014
GEM-169	124.028	144.065	0.021
GEM-169	144.065	164.11	0.038
GEM-169	164.11	184.159	0.03
GEM-169	184.159	204.21	0.016
GEM-169	204.21	224.266	0.045
GEM-169	224.267	244.323	0.021
GEM-169	244.322	264.375	0.021
GEM-170	144.617	164.63	0.068

BHID	FROM	TO	AU_OPT
GEM-170	164.63	184.65	0.038
GEM-170	184.65	204.66	0.029
GEM-170	204.66	224.69	0.031
GEM-170	224.69	244.71	0.062
GEM-170	244.71	244.97	0.02
GEM-170	244.97	245.00	0.02
GEM-171	163.85	183.86	0.017
GEM-172	107.22	127.22	0.049
GEM-172	147.22	167.23	0.026
GEM-172	167.23	187.23	0.013
GEM-172	187.23	207.24	0.061
GEM-172	207.24	227.26	0.073
GEM-172	227.26	247.27	0.054
GEM-172	247.27	267.28	0.015
GEM-172	267.28	287.30	0.021
GEM-172	287.30	307.31	0.018
GEM-173	127.71	147.71	0.031
GEM-173	167.71	187.72	0.032
GEM-173	187.72	207.73	0.026
GEM-173	207.73	227.74	0.015
GEM-173	227.74	247.75	0.019
GEM-173	247.75	267.75	0.028
GEM-173	267.76	287.76	0.019
GEM-173	339.98	340.00	0.01
GEM-174	260.00	271.33	0.031
GEM-174	271.33	291.33	0.037
GEM-174	291.33	311.33	0.012
GEM-175	149.83	169.83	0.016
GEM-175	169.83	189.84	0.03
GEM-175	189.84	209.85	0.015
GEM-175	209.85	229.86	0.129
GEM-175	229.86	249.88	0.102
GEM-175	249.88	269.89	0.043
GEM-175	269.89	289.90	0.115
GEM-175	289.90	309.92	0.025
GEM-176	248.50	268.50	0.018
GEM-176	268.50	288.50	0.021
GEM-176	288.50	308.50	0.013
GEM-177	105.63	125.67	0.029
GEM-177	125.67	145.71	0.017
GEM-178	110.00	130.01	0.017
GEM-178	130.01	150.01	0.03
GEM-178	150.01	170.02	0.022
GEM-178	170.02	190.03	0.032
GEM-178	190.03	210.04	0.05
GEM-178	210.04	230.05	0.051
GEM-178	250.06	270.07	0.03
GEM-178	270.07	290.08	0.01
GEM-178	290.08	310.10	0.02
GEM-178	328.51	330.11	0.01
GEM-179	90.94	110.95	0.012

BHID	FROM	TO	AU_OPT
GEM-179	110.953	130.97	0.046
GEM-179	130.971	150.987	0.047
GEM-179	150.987	170.996	0.054
GEM-179	170.996	191.005	0.422
GEM-179	191.005	211.013	0.408
GEM-179	211.013	231.02	0.212
GEM-179	231.019	251.026	0.264
GEM-179	251.026	271.036	0.064
GEM-179	271.036	291.046	0.034
GEM-179	291.046	294.054	0.03
GEM-180	90.904	110.905	0.036
GEM-180	110.905	130.906	0.047
GEM-180	130.906	150.907	0.025
GEM-180	150.907	170.909	0.02
GEM-180	210.915	230.92	0.078
GEM-180	230.92	250.926	0.096
GEM-180	250.926	270.942	0.048
GEM-180	270.942	290.958	0.15
GEM-181	134.444	154.455	0.043
GEM-181	154.455	174.475	0.031
GEM-181	174.475	194.495	0.035
GEM-181	194.495	214.522	0.179
GEM-181	214.522	234.552	0.362
GEM-181	234.551	254.585	0.057
GEM-181	314.721	334.761	0.035
GEM-182	52.307	72.31	0.022
GEM-182	72.31001	92.313	0.025
GEM-182	112.319	132.326	0.025
GEM-182	132.326	152.334	0.038
GEM-182	152.334	172.348	0.014
GEM-183	306.822	328.252	0.01
GEM-183	328.252	349.682	0.022
GEM-183	349.683	371.144	0.172
GEM-183	371.144	392.606	0.218
GEM-183	392.606	413.965	0.097
GEM-183	413.965	435.27	0.258
GEM-183	435.27	456.59	0.438
GEM-184	274.673	298.979	0.015
GEM-184	298.979	323.166	0.048
GEM-184	323.166	347.347	0.061
GEM-184	347.347	371.734	0.134
GEM-184	371.734	396.147	0.155
GEM-184	396.146	420.449	0.033
GEM-185	297.848	318.797	0.033
GEM-185	318.797	339.756	0.041
GEM-185	339.757	360.762	0.035
GEM-185	360.761	381.811	0.06
GEM-185	381.811	402.863	0.098
GEM-185	402.863	423.927	0.011
GEM-186	311.921	335.116	0.014
GEM-186	335.115	358.251	0.017

BHID	FROM	TO	AU_OPT
GEM-186	358.25	381.28	0.011
GEM-186	381.28	404.28	0.021
GEM-186	404.28	427.17	0.023
GEM-186	427.17	450.05	0.064
GEM-187	359.05	381.26	0.014
GEM-187	381.26	403.49	0.054
GEM-187	403.49	425.76	0.112
GEM-187	425.76	443.38	0.05
GEM-188	255.89	275.89	0.017
GEM-188	275.89	295.89	0.015
GEM-188	315.89	335.89	0.064
GEM-188	335.89	355.89	0.407
GEM-188	355.89	375.89	0.066
GEM-188	375.89	395.89	0.146
GEM-188	395.89	415.89	0.017
GEM-189	0.00	12.51	0.01
GEM-189	12.51	12.80	0.01
GEM-189	72.80	92.80	0.01
GEM-189	92.80	112.81	0.013
GEM-189	112.81	132.81	0.011
GEM-189	152.82	172.82	0.01
GEM-190	56.97	75.61	0.013
GEM-190	75.61	95.62	0.022
GEM-190	95.62	115.62	0.043
GEM-190	135.63	155.63	0.017
GEM-190	275.72	295.75	0.01
GEM-191	96.63	116.63	0.011
GEM-191	196.65	216.66	0.132
GEM-191	216.66	236.67	0.041
GEM-191	236.67	256.67	0.022
GEM-191	256.67	276.68	0.018
GEM-191	276.68	296.69	0.022
GEM-191	296.69	316.70	0.063
GEM-191	316.70	336.71	0.016
GEM-191	336.71	356.72	0.026
GEM-192	137.71	157.71	0.021
GEM-192	157.71	177.72	0.044
GEM-192	177.72	197.72	0.043
GEM-192	197.72	217.72	0.024
GEM-192	217.72	237.72	0.022
GEM-192	237.72	257.72	0.071
GEM-192	257.72	277.72	0.06
GEM-192	277.72	297.72	0.022
GEM-192	297.72	317.72	0.02
GEM-192	317.72	337.73	0.019
GEM-193	156.86	176.88	0.017
GEM-193	176.88	196.89	0.028
GEM-193	216.90	236.91	0.02
GEM-194	218.33	238.36	0.012
GEM-194	258.39	278.41	0.012
GEM-194	278.41	298.43	0.012

BHID	FROM	TO	AU_OPT
GEM-194	298.434	318.461	0.01
GEM-194	318.461	338.488	0.012
GEM-194	338.488	358.514	0.01
GEM-195	134.115	154.118	0.013
GEM-195	174.12	194.123	0.013
GEM-195	234.127	254.128	0.01
GEM-195	254.128	274.128	0.012
GEM-195	274.128	294.128	0.015
GEM-195	294.128	314.129	0.02
GEM-195	314.128	334.129	0.01
GEM-196	131.923	151.93	0.037
GEM-196	151.93	171.936	0.024
GEM-196	171.936	191.942	0.011
GEM-196	191.942	211.947	0.039
GEM-196	211.947	231.951	0.029
GEM-196	231.952	251.956	0.01
GEM-197	110.303	130.303	0.017
GEM-197	130.304	150.304	0.033
GEM-197	150.304	170.304	0.017
GEM-197	170.304	190.304	0.018
GEM-197	190.305	210.305	0.027
GEM-197	210.305	224.997	0.02
GEM-197	224.997	225	0.01
GEM-198	11.103	31.108	0.05
GEM-198	31.109	31.128	0.05
GEM-198	31.128	51.114	0.019
GEM-198	151.145	171.151	0.01
GEM-198	171.152	191.158	0.016
GEM-198	191.158	211.163	0.014
GEM-198	251.17	264.997	0.013
GEM-198	264.997	265	0.01
GEM-199	76.18	92.622	0.014
GEM-199	132.637	152.645	0.021
GEM-199	152.645	172.651	0.041
GEM-199	172.651	192.657	0.054
GEM-199	192.656	212.664	0.02
GEM-199	212.664	232.673	0.045
GEM-200	138.408	158.409	0.062
GEM-200	158.409	178.41	0.095
GEM-200	178.411	198.412	0.02
GEM-200	198.412	218.413	0.013
GEM-200	218.414	238.415	0.039
GEM-200	238.414	258.417	0.019
GEM-200	258.417	278.422	0.012
GEM-200	278.421	298.426	0.04
GEM-200	298.427	318.433	0.029
GEM-200	318.433	338.439	0.018
GEM-202	71.516	91.52	0.014
GEM-202	91.52	111.523	0.01
GEM-202	111.523	131.525	0.011
GEM-202	171.529	191.531	0.01

BHID	FROM	TO	AU_OPT
GEM-202	191.53	200.00	0.01
GEM-202	200.00	200.00	0.01
GEM-203	88.80	108.80	0.017
GEM-203	108.80	128.80	0.011
GEM-204	66.21	86.21	0.011
GEM-204	86.21	106.22	0.01
GEM-204	126.22	146.23	0.015
GEM-204	146.23	166.23	0.012
GEM-205	65.81	85.82	0.02
GEM-205	85.82	105.82	0.026
GEM-206	45.60	46.55	0.01
GEM-206	46.56	65.60	0.025
GEM-206	65.60	85.60	0.106
GEM-206	85.60	105.60	0.02
GEM-206	105.60	125.61	0.012
GEM-206	125.61	145.62	0.01
GEM-208	155.20	175.20	0.02
GEM-208	175.20	195.20	0.012
GEM-208	195.21	215.21	0.022
GEM-208	215.21	235.21	0.015
GEM-208	235.21	255.21	0.015
GEM-208	255.21	275.21	0.011
GEM-209	153.80	173.80	0.01
GEM-210	31.90	51.91	0.011
GEM-210	131.93	151.94	0.01
GEM-210	151.94	171.95	0.01
GEM-210	171.95	191.96	0.012
GEM-211	50.10	70.11	0.019
GEM-211	70.11	90.12	0.012
GEM-211	90.12	110.12	0.02
GEM-211	110.12	130.13	0.02
GEM-212	69.31	89.31	0.015
GEM-212	89.31	109.32	0.025
GEM-212	109.32	129.32	0.018
GEM-212	129.32	149.32	0.035
GEM-212	149.32	169.32	0.015
GEM-213	48.40	68.40	0.01
GEM-213	68.40	88.41	0.038
GEM-213	88.41	108.41	0.026
GEM-213	108.41	128.41	0.02
GEM-213	128.41	148.41	0.039
GEM-213	148.41	168.42	0.049
GEM-213	168.42	188.42	0.088
GEM-213	188.42	208.43	0.031
GEM-213	208.43	228.44	0.105
GEM-214	48.21	68.21	0.05
GEM-214	68.21	88.22	0.016
GEM-214	88.22	108.23	0.112
GEM-214	108.23	128.24	0.13
GEM-214	128.24	148.25	0.013
GEM-214	148.25	168.26	0.017

BHID	FROM	TO	AU_OPT
GEM-215	84.216	104.226	0.017
GEM-215	104.225	124.245	0.015
GEM-216	124.624	144.636	0.01
GEM-216	144.636	164.661	0.02
GEM-216	164.661	184.691	0.012
GEM-217	291.22	311.223	0.014
GEM-217	311.223	331.226	0.012
GEM-218	107.547	127.561	0.014
GEM-218	127.561	147.575	0.02
GEM-218	147.575	167.592	0.026
GEM-218	167.592	187.61	0.029
GEM-218	187.61	207.631	0.053
GEM-218	207.631	227.658	0.019
GEM-218	227.657	247.684	0.038
GEM-218	247.684	267.706	0.029
GEM-218	267.706	287.727	0.022
GEM-218	307.747	327.765	0.012
GEM-219	71.692	87.904	0.012
GEM-219	127.911	147.915	0.011
GEM-219	147.915	167.922	0.013
GEM-219	187.928	207.936	0.01
GEM-219	207.936	227.945	0.016
GEM-219	267.966	287.979	0.012
GEM-219	287.979	307.992	0.035
GEM-219	307.993	328.006	0.026
GEM-220	126.304	146.305	0.024
GEM-220	186.307	206.309	0.017
GEM-220	206.309	226.312	0.017
GEM-222	139.636	159.642	0.012
GEM-222	159.642	179.647	0.027
GEM-223	78.82201	98.83	0.02
GEM-223	98.83	118.845	0.036
GEM-223	118.845	138.86	0.017
GEM-223	138.859	158.876	0.019
GEM-223	158.876	178.895	0.049
GEM-223	178.895	198.914	0.012
GEM-224	22.201	42.202	0.043
GEM-224	42.202	62.202	0.055
GEM-224	62.202	82.202	0.092
GEM-224	82.202	102.202	0.02
GEM-224	102.202	122.202	0.028
GEM-224	122.203	142.203	0.028
GEM-224	142.203	162.205	0.011
GEM-224	221.166	222.226	0.01
GEM-225	20.401	40.401	0.012
GEM-225	60.403	80.406	0.017
GEM-225	100.409	120.421	0.011
GEM-226	63.534	83.549	0.013
GEM-226	83.549	103.566	0.045
GEM-228	59.305	79.308	0.014
GEM-230	136.405	156.41	0.01

BHID	FROM	TO	AU_OPT	BHID	FROM	TO	AU_OPT
GEM-230	176.42	196.43	0.011	GEM-246	133.621	153.627	0.027
GEM-233	95.11	115.11	0.011	GEM-247	91.425	111.434	0.012
GEM-233	115.11	135.12	0.015	GEM-247	111.433	131.443	0.015
GEM-233	175.14	195.16	0.042	GEM-247	131.444	151.453	0.056
GEM-235	133.42	153.42	0.01	GEM-247	171.458	191.463	0.013
GEM-236	59.41	79.41	0.018	GEM-248	71.911	91.92	0.032
GEM-236	79.41	99.42	0.029	GEM-248	91.92	111.93	0.251
GEM-236	119.42	139.43	0.057	GEM-248	111.93	131.94	0.067
GEM-236	139.43	159.43	0.015	GEM-248	131.94	151.951	0.04
GEM-237	56.60	76.60	0.01	GEM-248	151.95	171.963	0.029
GEM-237	76.60	96.61	0.012	GEM-249	49.702	69.705	0.017
GEM-237	96.61	116.61	0.016	GEM-249	69.705	89.708	0.024
GEM-237	116.61	136.61	0.043	GEM-249	89.709	109.715	0.018
GEM-237	136.61	156.61	0.027	GEM-249	109.714	129.725	0.013
GEM-237	156.61	176.61	0.012	GEM-249	129.725	149.736	0.015
GEM-238	93.61	113.61	0.289	GEM-250	18.266	28.603	0.015
GEM-238	113.61	133.61	0.143	GEM-250	28.603	48.605	0.011
GEM-238	133.61	153.61	0.037	GEM-250	48.605	68.611	0.022
GEM-238	153.61	173.61	0.018	GEM-250	68.61099	88.617	0.01
GEM-239	58.60	78.60	0.013	GEM-251	68.939	88.956	0.066
GEM-239	118.60	138.60	0.042	GEM-251	88.956	108.971	0.058
GEM-239	158.61	178.61	0.031	GEM-251	108.971	128.984	0.046
GEM-239	178.61	198.61	0.012	GEM-251	128.984	148.997	0.04
GEM-240	96.21	116.21	0.011	GEM-251	148.997	169.012	0.016
GEM-240	136.21	156.21	0.012	GEM-252	125.921	145.929	0.02
GEM-241	113.53	133.54	0.012	GEM-253	88.8	108.803	0.079
GEM-241	133.54	153.56	0.066	GEM-253	108.803	128.811	0.113
GEM-241	153.56	173.59	0.062	GEM-253	128.811	148.819	0.012
GEM-242	76.60	96.61	0.107	GEM-254	67.707	87.712	0.038
GEM-242	96.61	116.61	0.049	GEM-254	87.71201	107.717	0.043
GEM-242	116.61	136.61	0.016	GEM-254	107.717	127.722	0.015
GEM-242	136.61	156.61	0.033	GEM-254	127.721	147.726	0.012
GEM-242	156.61	176.62	0.026	GEM-255	142.816	162.828	0.021
GEM-243	95.11	115.12	0.024	GEM-256	43.402	63.408	0.026
GEM-243	115.12	135.12	0.02	GEM-256	63.408	83.417	0.041
GEM-243	135.12	155.13	0.027	GEM-256	83.416	103.426	0.098
GEM-243	155.13	175.13	0.01	GEM-256	103.427	123.44	0.036
GEM-244	73.22	93.22	0.053	GEM-256	123.44	143.453	0.211
GEM-244	93.22	113.23	0.137	GEM-256	143.453	163.474	0.074
GEM-244	113.24	133.25	0.166	GEM-256	163.474	183.499	0.021
GEM-244	133.25	153.26	0.123	GEM-257	45.039	65.063	0.02
GEM-244	153.26	173.28	0.017	GEM-257	105.116	125.15	0.012
GEM-244	173.28	193.30	0.022	GEM-258	9.004999	18.3	0.082
GEM-245	48.60	68.60	0.016	GEM-258	18.3	38.301	0.012
GEM-245	88.60	108.60	0.011	GEM-258	38.3	58.301	0.042
GEM-245	108.60	128.60	0.026	GEM-258	58.302	78.302	0.077
GEM-245	128.60	148.60	0.024	GEM-258	78.302	98.302	0.018
GEM-245	148.60	168.61	0.019	GEM-258	98.302	118.307	0.014
GEM-246	73.61	93.61	0.023	GEM-259	59.404	79.406	0.018
GEM-246	93.61	113.62	0.028	GEM-259	79.406	99.408	0.291
GEM-246	113.62	133.62	0.033	GEM-259	99.408	119.425	0.061

BHID	FROM	TO	AU_OPT
GEM-259	119.43	139.44	0.098
GEM-260	122.31	142.31	0.013
GEM-261	52.37	64.02	0.011
GEM-261	64.02	84.03	0.025
GEM-261	84.03	104.04	0.036
GEM-261	104.04	124.05	0.019
GEM-262	87.20	107.20	0.03
GEM-263	84.51	104.52	0.029
GEM-263	124.52	144.52	0.014
GEM-265	45.21	65.21	0.04
GEM-267	18.21	27.10	0.014
GEM-267	27.10	47.10	0.015
GEM-267	47.10	67.11	0.011
GEM-268	30.80	50.80	0.617
GEM-268	50.80	70.81	0.096
GEM-268	70.81	90.82	15.372
GEM-268	170.83	190.84	0.01
GEM-269	30.60	50.60	0.024
GEM-269	50.60	70.60	0.9
GEM-269	70.61	90.61	0.43
GEM-269	90.61	110.61	0.233
GEM-269	110.61	130.61	0.02
GEM-269	130.61	150.61	0.018
GEM-269	150.61	170.61	0.027
GEM-269	170.61	190.61	0.012
GEM-270	68.21	88.21	0.057
GEM-270	88.21	108.22	0.023
GEM-270	108.22	128.22	0.01
GEM-271	89.32	109.33	0.01
GEM-271	109.33	129.34	0.04
GEM-272	49.60	69.60	0.01
GEM-272	69.60	89.60	0.18
GEM-272	89.60	109.61	0.069
GEM-272	109.61	129.61	0.022
GEM-272	129.61	149.61	0.01
GEM-273	45.50	65.50	0.015
GEM-273	85.51	105.51	0.014
GEM-273	105.51	125.51	0.012
GEM-274	47.19	63.10	0.02
GEM-274	63.10	83.10	0.017
GEM-274	83.10	103.10	0.036
GEM-274	103.10	123.10	0.018
GEM-274	123.10	143.11	0.01
GEM-275	68.01	88.01	0.032
GEM-275	88.01	108.02	0.02
GEM-275	108.02	128.03	0.015
GEM-276	31.21	51.21	0.012
GEM-276	51.21	71.22	0.01
GEM-276	91.22	111.23	0.015
GEM-276	111.23	131.24	0.012
GEM-276	131.24	151.25	0.027

BHID	FROM	TO	AU_OPT
GEM-276	151.249	171.279	0.012
GEM-277	74.312	94.317	0.012
GEM-277	154.323	174.33	0.012
GEM-277	174.33	194.336	0.01
GEM-277	194.337	214.348	0.013
GEM-278	95.81799	115.826	0.01
GEM-278	115.826	135.836	0.01
GEM-278	135.836	155.85	0.027
GEM-278	155.85	175.874	0.011
GEM-279	138.915	158.923	0.01
GEM-279	158.924	178.935	0.013
GEM-279	178.935	198.946	0.017
GEM-279	198.946	218.959	0.018
GEM-280	96.13	116.133	0.011
GEM-280	116.133	136.134	0.012
GEM-280	136.135	156.138	0.019
GEM-280	156.137	176.145	0.092
GEM-280	176.145	196.153	0.01
GEM-280	196.153	216.166	0.044
GEM-281	92.105	112.108	0.017
GEM-281	112.108	132.112	0.017
GEM-281	132.112	152.116	0.04
GEM-281	152.116	172.125	0.063
GEM-281	172.125	192.134	0.065
GEM-281	232.158	252.171	0.012
GEM-282	75.017	95.03	0.02
GEM-282	95.03	115.044	0.02
GEM-282	115.044	135.059	0.015
GEM-282	135.06	155.075	0.012
GEM-282	155.074	175.09	0.025
GEM-282	175.09	195.106	0.01
GEM-282	195.106	215.111	0.012
GEM-283	97.706	117.711	0.011
GEM-283	117.711	137.716	0.031
GEM-283	137.716	157.726	0.136
GEM-283	157.726	177.744	0.069
GEM-283	177.743	197.761	0.065
GEM-283	197.762	217.809	0.025
GEM-284	123.049	124.062	0.01
GEM-284	124.062	144.077	0.051
GEM-284	144.077	164.093	0.053
GEM-285	31.607	51.612	0.012
GEM-285	51.611	71.633	0.047
GEM-285	71.633	91.655	0.01
GEM-285	91.655	111.686	0.027
GEM-285	111.686	131.723	0.039
GEM-285	131.723	151.761	0.042
GEM-285	151.761	171.804	0.016
GEM-286	120.612	140.614	0.062
GEM-287	156.422	176.437	0.03
GEM-287	176.437	196.452	0.084

BHID	FROM	TO	AU_OPT
GEM-287	196.45	216.46	0.016
GEM-288	155.40	175.42	0.031
GEM-288	235.53	255.57	0.01
GEM-289	211.06	231.13	0.015
GEM-290	136.01	156.02	0.012
GEM-290	196.06	216.09	0.014
GEM-290	236.13	256.16	0.016
GEM-291	118.51	138.51	0.01
GEM-291	158.51	178.52	0.012
GEM-291	198.52	218.52	0.015
GEM-291	278.55	298.57	0.01
GEM-291	298.57	299.97	0.01
GEM-291	299.97	300.00	0.01
GEM-292	179.87	199.88	0.02
GEM-292	199.88	219.90	0.042
GEM-292	219.90	239.93	0.012
GEM-293	82.10	102.10	0.021
GEM-293	102.10	122.10	0.01
GEM-294	16.95	23.10	0.037
GEM-294	23.10	43.10	0.02
GEM-294	83.10	103.11	0.012
GEM-294	103.11	123.11	0.01
GEM-294	123.11	143.12	0.012
GEM-295	146.62	166.63	0.017
GEM-296	124.12	144.12	0.031
GEM-296	164.13	184.14	0.012
GEM-297	222.33	242.34	0.01
GEM-297	242.34	262.34	0.012
GEM-298	99.91	119.91	0.01
GEM-298	119.91	139.92	0.01
GEM-298	219.93	239.93	0.03
GEM-298	239.93	259.94	0.015
GEM-298	259.94	279.95	0.015
GEM-299	67.80	87.80	0.01
GEM-299	127.82	147.83	0.012
GEM-300	45.90	65.90	0.018
GEM-300	105.91	125.91	0.01
GEM-300	125.91	145.91	0.024
GEM-300	145.91	165.91	0.02
GEM-300	165.91	185.91	0.012
GEM-300	185.92	199.99	0.01
GEM-300	199.99	200.00	0.01
GEM-301	130.61	150.62	0.015
GEM-301	150.62	170.63	0.012
GEM-301	170.63	190.63	0.01
GEM-301	190.63	210.64	0.012
GEM-302	170.17	190.19	0.013
GEM-302	190.19	199.99	0.025
GEM-302	199.99	200.00	0.03
GEM-303	175.01	195.02	0.015
GEM-303	195.02	215.02	0.012

BHID	FROM	TO	AU_OPT
GEM-303	215.023	235.034	0.013
GEM-303	235.034	255.043	0.012
GEM-304	572.315	592.378	0.013
GEM-304	592.378	612.48	0.023
GEM-304	612.481	632.606	0.018
GEM-304	652.726	672.811	0.047
GEM-304	672.81	692.872	0.015
GEM-305	491.281	511.288	0.015
GEM-305	511.288	531.296	0.033
GEM-305	531.296	551.305	0.033
GEM-306	614.259	634.26	0.011
GEM-306	634.259	654.26	0.039
GEM-306	654.261	674.261	0.037
GEM-306	674.261	694.261	0.024
GEM-307	532.985	552.994	0.059
GEM-307	552.995	573.003	0.239
GEM-307	573.003	593.011	0.081
GEM-307	593.011	613.018	0.17
GEM-307	613.017	633.024	0.091
GEM-307	633.025	653.032	0.057
GEM-307	653.032	673.039	0.017
GEM-308	490.743	510.753	0.026
GEM-308	510.753	530.763	0.154
GEM-308	530.763	550.773	0.03
GEM-308	550.772	570.786	0.019
GEM-308	630.849	650.878	0.022
GEM-309	288.921	308.996	0.017
GEM-309	349.152	369.249	0.012
GEM-309	369.249	389.347	0.051
GEM-309	389.347	409.449	0.041
GEM-309	409.449	429.555	0.03
GEM-309	429.554	449.66	0.032
GEM-309	449.66	469.806	0.01
GEM-309	469.806	489.952	0.037
GEM-309	489.952	510.125	0.065
GEM-309	510.124	530.323	0.023
GEM-309	530.324	550.524	0.043
GEM-309	550.524	570.781	0.017
GEM-310	322.406	343.286	0.012
GEM-310	343.286	364.211	0.023
GEM-310	364.211	385.158	0.015
GEM-310	385.158	406.093	0.01
GEM-310	406.093	427	0.011
GEM-310	427	447.907	0.041
GEM-310	447.908	468.812	0.121
GEM-310	468.811	489.715	0.314
GEM-310	489.716	510.834	0.464
GEM-310	510.834	527.58	0.113
GEM-311	346.629	366.632	0.05
GEM-311	366.632	386.635	0.028
GEM-311	386.635	406.64	0.012

BHID	FROM	TO	AU_OPT
GEM-311	406.64	426.65	0.028
GEM-311	426.65	446.66	0.025
GEM-311	446.66	466.67	0.049
GEM-311	466.67	486.68	0.019
GEM-311	486.68	506.70	0.026
GEM-311	506.70	526.72	0.144
GEM-311	526.72	546.74	0.041
GEM-312	250.94	255.35	0.01
GEM-312	255.35	276.12	0.01
GEM-312	296.88	317.64	0.011
GEM-313	267.43	290.97	0.01
GEM-313	290.97	314.61	0.011
GEM-313	338.33	362.06	0.014
GEM-313	362.06	385.81	0.01
GEM-313	409.48	433.02	0.01
GEM-314	386.49	406.51	0.026
GEM-314	406.51	426.53	0.022
GEM-314	426.53	446.55	0.046
GEM-314	446.55	466.58	0.012
GEM-314	466.58	486.60	0.077
GEM-314	486.60	506.63	0.131
GEM-314	506.64	526.67	0.056
GEM-314	526.67	546.71	0.159
GEM-316	291.55	317.04	0.033
GEM-316	317.04	342.56	0.016
GEM-316	342.56	368.23	0.033
GEM-316	368.23	393.96	0.012
GEM-316	393.96	419.51	0.014
GEM-317	245.34	247.53	0.01
GEM-317	247.53	265.37	0.056
GEM-317	265.37	285.40	0.038
GEM-317	345.48	365.49	0.015
GEM-317	385.51	405.52	0.014
GEM-317	405.52	425.53	0.012
GEM-317	425.53	445.54	0.016
GEM-317	445.54	465.55	0.01
GEM-317	465.55	485.56	0.04
GEM-317	485.56	505.57	0.292
GEM-317	505.57	525.58	0.15
GEM-317	525.58	545.59	0.059
GEM-318	294.71	315.41	0.011
GEM-318	315.41	336.13	0.021
GEM-318	377.59	398.33	0.01
GEM-320	348.66	368.67	0.135
GEM-320	368.67	388.68	0.038
GEM-320	428.69	448.70	0.011
GEM-320	448.70	468.71	0.015
GEM-320	468.71	488.72	0.037
GEM-320	488.72	508.73	0.01
GEM-320	508.73	528.74	0.021
GEM-320	528.74	548.76	0.059

BHID	FROM	TO	AU_OPT
GEM-320	548.759	568.775	0.189
GEM-320	568.775	588.791	0.041
GEM-320	588.792	608.81	0.075
GEM-320	608.81	628.831	0.112
GEM-320	628.831	648.852	0.046
GEM-320	648.852	668.864	0.014
GEM-321	286.969	310.126	0.031
GEM-321	310.126	333.246	0.01
GEM-321	379.456	402.549	0.019
GEM-322	240.679	258.539	0.01
GEM-322	258.539	286.116	0.016
GEM-322	286.115	313.649	0.02
GEM-322	313.649	341.139	0.028
GEM-322	341.139	368.401	0.06
GEM-322	368.401	395.554	0.105
GEM-322	395.554	422.584	0.025
GEM-322	422.584	449.59	0.037
GEM-323	317.423	341.522	0.026
GEM-323	341.521	365.73	0.023
GEM-323	365.731	389.999	0.053
GEM-323	389.999	414.181	0.014
GEM-324	294.693	317.204	0.011
GEM-324	317.204	339.717	0.011
GEM-324	339.716	362.265	0.041
GEM-324	362.266	384.844	0.034
GEM-325	287.881	307.293	0.011
GEM-325	328.049	348.805	0.022
GEM-325	348.805	369.615	0.035
GEM-325	369.615	390.428	0.011
GEM-326	351.408	373.387	0.01
GEM-326	395.366	417.311	0.021
GEM-327	345.833	366.181	0.01
GEM-328	328.843	351.293	0.013
GEM-328	398.267	421.693	0.011
GEM-330	650.412	670.46	0.011
GEM-331	449.252	469.256	0.011
GEM-331	489.259	509.263	0.017
GEM-331	529.2679	549.272	0.027
GEM-331	549.271	569.275	0.019
GEM-332	654.76	674.761	0.026
GEM-332	674.762	694.763	0.012
GEM-332	694.763	698.147	0.038
GEM-332	698.147	714.764	0.016
GEM-334	508.873	528.881	0.026
GEM-334	568.895	588.901	0.012
GEM-335	487.125	507.127	0.012
GEM-335	507.127	527.128	0.025
GEM-335	547.13	567.13	0.048
GEM-335	567.13	587.13	0.029
GEM-335	587.13	607.131	0.01
GEM-335	607.132	621.748	0.015

BHID	FROM	TO	AU_OPT
GEM-336	370.66	390.92	0.032
GEM-336	390.92	411.20	0.012
GEM-336	431.50	451.79	0.012
GEM-336	451.79	472.11	0.021
GEM-336	472.11	492.42	0.017
GEM-336	492.42	512.78	0.019
GEM-336	512.78	533.17	0.028
GEM-337	383.90	404.94	0.014
GEM-337	404.94	426.02	0.012
GEM-337	426.02	447.09	0.031
GEM-337	447.09	468.21	0.035
GEM-337	468.21	489.33	0.232
GEM-337	489.33	510.49	0.238
GEM-337	510.49	519.18	0.05
GEM-338	505.16	525.17	0.016
GEM-339	436.04	456.55	0.013
GEM-339	456.55	477.07	0.012
GEM-339	477.07	497.58	0.013
GEM-340	422.47	445.45	0.06
GEM-340	445.45	468.36	0.02
GEM-341	337.05	357.05	0.014
GEM-342	373.40	394.50	0.01
GEM-343	349.59	373.30	0.012
GEM-343	373.30	397.02	0.025
GEM-343	397.02	420.65	0.013
GEM-344	336.88	356.90	0.012
GEM-344	376.91	396.93	0.032
GEM-344	396.93	416.94	0.02
GEM-344	416.94	436.96	0.01
GEM-344	436.96	456.98	0.042
GEM-344	456.98	477.00	0.032
GEM-345	308.76	334.11	0.012
GEM-345	334.11	359.44	0.011
GEM-345	359.44	384.75	0.078
GEM-345	384.75	410.01	0.092
GEM-345	410.01	435.20	0.042
GEM-346	369.28	390.55	0.022
GEM-346	390.55	411.84	0.064
GEM-346	411.84	433.15	0.028
GEM-346	475.90	497.32	0.052
GEM-346	497.32	518.72	0.095
GEM-346	518.72	540.12	0.045
GEM-346	540.12	561.48	0.043
GEM-346	561.48	582.81	0.037
GEM-347	429.87	453.48	0.014
GEM-347	453.48	477.17	0.014
GEM-348	376.32	396.32	0.014
GEM-348	396.32	416.32	0.01
GEM-348	436.32	456.32	0.015
GEM-348	456.32	476.32	0.023
GEM-348	476.32	496.32	0.012
GEM-348	516.321	536.321	0.012
GEM-349	483.819	503.836	0.013
GEM-349	503.836	523.852	0.015
GEM-350	413.417	433.918	0.014
GEM-350	433.919	454.422	0.022
GEM-350	454.422	474.935	0.024
GEM-350	474.935	495.448	0.019
GEM-350	495.447	515.979	0.01
GEM-351	352.887	374.683	0.018
GEM-351	374.682	396.478	0.022
GEM-351	440.127	462.026	0.02
GEM-351	462.026	483.984	0.026
GEM-351	483.985	505.948	0.035
GEM-351	505.948	527.943	0.244
GEM-352	341.679	361.692	0.019
GEM-352	401.721	421.736	0.013
GEM-352	421.737	441.752	0.024
GEM-352	441.752	461.775	0.011
GEM-352	461.774	481.803	0.019
GEM-352	481.803	501.832	0.044
GEM-353	352.734	373.464	0.012
GEM-353	373.464	394.194	0.01
GEM-353	435.679	456.417	0.036
GEM-353	456.417	477.138	0.072
GEM-353	477.138	497.859	0.057
GEM-354	389.757	412.385	0.051
GEM-354	412.386	435.014	0.027
GEM-354	435.014	457.642	0.021
GEM-354	457.642	480.27	0.018
GEM-354	480.271	494.728	0.011
GEM-355	415.005	435.331	0.02
GEM-355	435.331	455.658	0.029
GEM-355	455.659	475.99	0.02
GEM-355	475.99	496.321	0.02
GEM-355	496.321	516.647	0.025
GEM-355	516.647	536.972	0.014
GEM-355	536.972	557.307	0.029
GEM-355	577.659	598.011	0.01
GEM-355	598.011	618.382	0.011
GEM-356	83.513	103.52	0.01
GEM-356	103.52	123.526	0.017
GEM-356	123.526	143.532	0.012
GEM-357	63.507	83.511	0.054
GEM-357	83.511	103.515	0.013
GEM-358	92.319	112.321	0.016
GEM-358	112.322	132.322	0.116
GEM-358	132.322	152.323	0.014
GEM-359	47.505	67.506	0.02
GEM-359	67.506	87.507	0.017
GEM-359	87.507	107.515	0.014
GEM-360	43.905	63.907	0.016

BHID	FROM	TO	AU_OPT
GEM-361	24.51	38.10	0.096
GEM-361	38.10	58.10	0.11
GEM-361	58.10	78.10	0.01
GEM-363	56.80	76.80	0.016
GEM-363	76.80	96.81	0.018
GEM-363	96.81	116.82	0.046
GEM-370	44.71	64.72	0.013
GEM-370	64.72	84.73	0.01
GEM-376	20.15	29.30	0.019
GEM-376	29.30	49.30	0.012
GEM-376	49.30	69.30	0.047
GEM-376	69.30	89.30	0.043
GEM-376	89.30	109.31	0.065
GEM-376	109.31	129.31	0.128
GEM-376	129.31	149.31	0.074
GEM-376	149.31	169.31	0.014
GEM-376	169.31	189.31	0.013
GEM-377	209.68	229.77	0.012
GEM-377	249.85	269.98	0.022
GEM-377	269.98	290.11	0.015
GEM-378	274.92	294.96	0.03
GEM-379	257.29	277.31	0.02
GEM-380C	144.81	164.81	0.058
GEM-380C	164.81	184.81	0.021
GEM-380C	184.81	204.82	0.052
GEM-380C	204.82	224.82	0.037
GEM-380C	224.82	244.82	0.069
GEM-380C	244.82	264.82	0.017
GEM-380C	264.82	265.00	0.02
GEM-380C	265.00	265.00	0.02
GEM-381C	31.00	51.00	0.46
GEM-381C	51.00	71.00	0.039
GEM-381C	71.00	91.00	4
GEM-381C	91.00	111.00	0.019
GEM-381C	111.00	131.00	0.052
GEM-381C	131.00	151.00	0.031
GEM-381C	151.00	171.00	0.044
GEM-382C	50.90	70.90	0.015
GEM-382C	90.90	110.90	0.016
GEM-382C	110.90	130.90	0.037
GEM-382C	130.90	150.90	0.161
GEM-382C	150.90	170.90	0.121
GEM-382C	170.90	190.90	0.047
GEM-382C	190.90	210.90	0.012
GEM-382C	210.90	230.90	0.055
GEM-382C	230.90	250.90	0.131
GEM-382C	250.90	270.90	0.088
GEM-382C	270.90	290.90	0.011
GEM-383C	301.10	322.06	0.013
GEM-383C	322.06	343.02	0.034
GEM-383C	343.02	363.94	0.04

BHID	FROM	TO	AU_OPT
GEM-383C	363.935	384.829	0.021
GEM-383C	405.722	426.613	0.011
GEM-383C	426.613	447.504	0.134
GEM-383C	447.504	468.379	0.123
GEM-383C	468.379	489.252	0.334
GEM-383C	489.252	510.11	0.195
GEM-384C	23.8	43.801	0.01
GEM-384C	43.801	63.802	0.057
GEM-384C	63.801	83.802	0.113
GEM-384C	83.802	103.803	0.306
GEM-384C	103.803	123.803	0.02
GEM-384C	123.804	143.804	0.038
GEM-384C	143.804	163.804	0.043
GEM-384C	163.804	183.804	0.015
GEM-385C	217.684	239.238	0.01
GEM-385C	239.238	260.771	0.012
GEM-385C	303.794	325.297	0.014
GEM-385C	325.297	346.8	0.037
GEM-385C	346.8	368.313	0.103
GEM-385C	368.313	389.828	0.18
GEM-385C	389.828	411.346	0.062
GEM-385C	411.346	432.867	0.23
GEM-385C	432.867	454.382	0.134
GEM-386	313.889	333.891	0.011
GEM-387	276.073	296.075	0.051
GEM-388	426.082	446.917	0.035
GEM-388	446.916	467.81	0.016
GEM-388	467.81	488.714	0.023
GEM-388	488.714	509.628	0.041
GEM-388	509.628	530.554	0.042
GEM-388	530.554	551.172	0.11
GEM-388	551.172	551.479	0.036
GEM-388	551.48	572.39	0.066
GEM-388	572.39	593.308	0.032
GEM-388	593.308	604.886	0.024
GEM-389	443.861	465.429	0.01
GEM-391	176.092	190.921	0.016
GEM-391	190.921	196.094	0.031
GEM-391	196.094	216.095	0.029
GEM-391	216.095	236.096	0.019
GEM-391	236.096	256.098	0.019
GEM-391	276.102	296.107	0.01
GEM-391	296.107	316.116	0.012
GEM-391	396.213	416.262	0.02
GEM-391	416.262	436.314	0.019
GEM-391	436.314	456.07	0.011
GEM-392	292.343	312.354	0.012
GEM-392	372.397	387.675	0.011
GEM-392	387.675	392.415	0.014
GEM-392	392.415	412.434	0.019
GEM-392	412.434	432.453	0.029

BHID	FROM	TO	AU_OPT	BHID	FROM	TO	AU_OPT
GEM-393	292.16	312.21	0.012	GEM-407	174.428	197.065	0.022
GEM-393	312.21	332.27	0.01	GEM-407	197.064	219.76	0.021
GEM-393	372.38	392.43	0.022	GEM-407	219.761	242.465	0.011
GEM-393	392.43	393.94	0.011	GEM-408	112.101	137.173	0.01
GEM-393	393.94	412.49	0.014	GEM-408	137.173	162.122	0.01
GEM-395	169.61	189.65	0.018	GEM-408	162.122	186.941	0.021
GEM-395	189.65	209.68	0.024	GEM-408	186.942	211.746	0.037
GEM-396	219.72	239.74	0.028	GEM-408	211.745	236.533	0.011
GEM-396	239.74	259.75	0.038	GEM-409	108.558	133.798	0.016
GEM-396	299.79	319.81	0.01	GEM-409	133.798	159.097	0.024
GEM-397	280.29	300.29	0.01	GEM-409	159.097	184.502	0.043
GEM-398	0.00	1.91	0.02	GEM-409	184.502	209.878	0.187
GEM-400	108.36	130.72	0.017	GFC-001	48.624	66	0.014
GEM-400	130.72	153.07	0.014	GFC-001	66	86	0.014
GEM-400	153.07	175.31	0.026	GFC-001	86	106	0.022
GEM-400	175.31	197.55	0.045	GFC-001	106	126	0.011
GEM-400	197.55	219.73	0.01	GFC-001	126	146	0.018
GEM-401	79.14	100.69	0.013	GFC-001	146	166	0.013
GEM-401	100.69	122.26	0.011	GFC-001	166	186	0.026
GEM-401	122.26	143.82	0.038	GFC-001	186	206	0.031
GEM-401	143.82	165.38	0.037	GFC-001	206	226	0.015
GEM-401	165.38	186.93	0.031	GFC-001	226	246	0.038
GEM-402	60.62	84.30	0.013	GFC-001	246	266	0.018
GEM-402	84.30	107.91	0.029	GFC-001	266	286	0.027
GEM-402	107.91	131.40	0.02	GFC-002	101.8	121.8	0.013
GEM-402	154.91	178.46	0.038	GFC-002	121.8	141.8	0.014
GEM-402	178.46	202.01	0.023	GFC-002	141.8	161.8	0.033
GEM-402	202.01	225.48	0.011	GFC-002	161.8	181.8	0.019
GEM-402	225.48	248.95	0.012	GFC-003	382.8	402.8	0.019
GEM-403	102.47	124.39	0.036	GFC-003	402.8	422.8	0.025
GEM-403	124.39	146.30	0.038	GFC-003	422.8	442.8	0.023
GEM-403	146.30	168.20	0.021	GFC-003	442.8	462.8	0.345
GEM-403	168.20	190.10	0.012	GFC-003	462.8	482.8	0.44
GEM-404	111.96	135.71	0.99	GFC-004	151.006	177.055	0.011
GEM-404	135.71	159.48	2.068	GFC-004	177.055	202.435	0.07
GEM-404	159.48	183.26	0.027	GFC-004	202.436	227.816	0.202
GEM-405	53.65	74.86	0.043	GFC-004	227.816	253.196	0.146
GEM-405	74.86	96.07	0.076	GFC-004	253.196	278.552	0.151
GEM-405	96.07	117.24	0.077	GFC-004	278.553	303.762	0.019
GEM-405	117.24	138.40	0.018	GFC-004	303.762	328.945	0.038
GEM-405	138.40	159.59	0.01	GFC-004	328.944	353.987	0.011
GEM-406	34.00	55.94	0.027	GFC-005	95.102	99.402	0.01
GEM-406	55.94	77.67	0.08	GFC-005	147.319	173.427	0.016
GEM-406	77.67	99.41	0.16	GFC-005	173.426	199.184	0.058
GEM-406	99.41	121.02	0.288	GFC-005	199.185	224.92	0.013
GEM-406	121.02	142.63	0.099	GFC-005	224.92	250.655	0.058
GEM-406	142.63	164.36	0.016	GFC-005	250.655	276.39	0.175
GEM-406	164.36	186.16	0.031	GFC-005	276.39	302.125	0.065
GEM-407	106.50	129.15	0.023	GFC-005	327.821	353.201	0.014
GEM-407	129.15	151.79	0.067	GFC-005	378.582	403.962	0.01
GEM-407	151.79	174.43	0.014	GFC-005	403.962	429.342	0.029

BHID	FROM	TO	AU_OPT
GFC-005	429.34	454.72	0.011
GFC-005	454.72	480.10	0.015
GFC-006	43.20	53.78	0.016
GFC-006	53.77	69.02	0.019
GFC-006	95.13	121.23	0.013
GFC-006	121.23	147.34	0.01
GFC-006	147.34	173.45	0.023
GFC-006	173.45	199.56	0.025
GFC-006	199.56	225.66	0.012
GFC-006	225.66	251.58	0.025
GFC-006	251.58	277.50	0.027
GFC-006	277.50	303.42	0.014
GFC-006	303.42	329.31	0.217
GFC-006	329.31	355.04	0.308
GFC-006	355.04	380.70	0.183
GFC-006	380.70	406.08	0.022
GFC-007	160.01	186.12	0.012
GFC-007	212.23	238.29	0.011
GFC-007	238.29	264.02	0.011
GFC-007	264.02	289.69	0.022
GFC-007	289.69	315.07	0.013
GFC-007	315.07	340.45	0.204
GFC-007	340.45	365.83	0.015
GFC-007	391.17	416.38	0.017
GFC-008	160.50	183.60	0.01
GFC-008	183.60	206.69	0.015
GFC-008	206.69	229.79	0.011
GFC-008	229.79	252.88	0.023
GFC-008	252.88	275.97	0.062
GFC-008	275.97	298.95	0.02
GFC-008	321.93	344.91	0.021
GFC-008	344.91	367.89	0.025
GFC-008	367.89	390.79	0.039
GFC-008	390.79	413.65	0.019
GFC-008	413.65	436.52	0.026
GFC-008	436.52	459.39	0.014
GFC-008	459.39	482.26	0.011
GFC-009	116.71	136.71	0.01
GFC-009	136.72	156.72	0.027
GFC-009	216.74	236.74	0.011

McMahon Significant Assays

BHID	FROM	TO	AU_ORG
D-1	50.00	51.57	0.07
D-1	51.57	61.52	0.077
D-1	61.52	63.00	0.076
D-1A	55.00	70.00	0.108
D-1A	70.00	70.03	0.216
D-1A	70.03	75.00	0.216
D-11	55.00	60.00	0.05
D-11	70.00	75.00	0.015
D-11	85.00	90.00	0.015
D-12	215.00	220.00	0.012
D-3	21.47	36.47	0.027
D-3	36.47	44.79	0.065
D-3	44.79	46.50	0.012
D-3	46.50	50.47	0.012
D-3	52.04	67.04	0.011
D-4	0.00	5.01	0.082
D-4	5.01	20.01	0.023
D-4	20.01	35.01	0.043
D-4	35.01	50.01	0.026
D-4	50.01	53.87	0.041
D-4	53.87	55.00	0.041
D-4B	55.00	70.00	0.018
D-4B	70.00	85.00	0.01
D-4B	130.00	145.00	0.013
D-5	0.00	4.17	0.035
D-5	4.17	19.17	0.037
D-5	19.17	34.17	0.018
D-5	34.17	49.17	0.03
D-5	100.00	115.00	0.011
D-5	115.00	127.35	0.032
D-5	127.35	142.35	0.024
D-5	142.35	157.35	0.039
D-5	157.35	165.00	0.061
D-6	0.00	1.80	0.058
D-6	1.80	16.80	0.032
D-6	16.80	31.80	0.016
D-6	31.80	46.80	0.018
D-6	46.80	61.80	0.012
D-6	76.80	91.80	0.01
D-6	91.80	106.80	0.013
D-6	166.80	181.80	0.018
D-6	181.80	196.80	0.02
D-6	196.80	211.80	0.026
D-6	211.80	226.80	0.026
D-6	226.80	238.36	0.019
D-6	238.36	239.97	0.023
D-6	239.97	248.75	0.021
D-6	248.75	250.68	0.018
D-6	250.68	265.68	0.025
D-6	265.68	280.68	0.028
D-6	280.68	295.68	0.034

BHID	FROM	TO	AU_ORG
D-6	295.68	307.12	0.087
D-6	307.12	320.00	0.064
D-7	77.94	92.94	0.011
D-7	92.95	96.98	0.022
D-7	96.98	111.98	0.049
D-7	111.98	126.98	0.039
D-7	126.98	141.98	0.038
D-7	141.98	156.98	0.056
D-7	156.98	167.82	0.026
D-7	167.82	169.58	0.032
D-7	169.58	170.00	0.032
D-9	15.00	20.00	0.012
GB-4	17.07	32.07	0.022
GB-4	32.07	39.20	0.032
GB-5	29.65	44.65	0.011
GB-5	44.65	51.33	0.027
GB-6	21.00	36.00	0.011
GB-8	27.58	42.58	0.012
GB-8	191.67	206.67	0.018
GB-8	206.67	221.67	0.016
GB-9	0.00	3.36	0.082
GB-9	3.36	18.36	0.103
GFGB-041	94.16	109.16	0.013
GFGB-041	109.16	109.50	0.02
GFMCMR-1	62.42	77.42	0.01
GFMCM-056	0.00	0.28	0.023
GFMCM-056	0.28	15.28	0.022
GFMCM-056	15.28	30.28	0.013
GFMCM-056	30.28	45.28	0.031
GFMCM-056	45.28	60.28	0.027
GFMCM-056	60.28	75.28	0.017
GFMCM-056	135.28	150.28	0.026
GFMCM-056	150.28	165.28	0.063
GFMCM-056	165.28	180.28	0.626
GFMCM-056	180.28	184.70	0.023
GFMCM-056	184.70	185.00	0.023
GFMCM-056	195.00	210.00	0.022
GFMCM-056	210.00	225.00	0.054
GFMCM-056	225.00	225.08	0.033
GFMCM-056	225.08	240.08	0.032
GFMCM-056	240.08	255.08	0.011
GFMCM-056	285.08	285.97	0.03
GFMCM-056	285.97	300.97	0.023
GFMCM-056	300.97	315.97	0.026
GFMCM-056	315.97	330.97	0.02
GFMCM-056	330.97	345.97	0.014
GFMCM-056	345.97	360.97	0.047
GFMCM-056	360.97	375.97	0.153
GFMCM-056	375.97	390.97	0.163
GFMCM-056	390.97	405.97	0.084
GFMCM-056	405.97	420.97	0.041

BHID	FROM	TO	AU_ORG	BHID	FROM	TO	AU_ORG
GFMCM-056	420.97	435.97	0.022	GFMCM-070	0.00	13.37	0.032
GFMCM-057	61.33	76.33	0.013	GFMCM-070	13.37	28.37	0.011
GFMCM-057	76.33	91.33	0.017	GFMCM-070	28.37	43.37	0.011
GFMCM-057	91.33	101.09	0.012	GFMCM-070	86.08	97.08	0.018
GFMCM-057	116.09	131.09	0.025	GFMCM-072	403.61	418.61	0.139
GFMCM-057	131.09	146.09	0.041	GFMCM-072	418.61	433.61	0.068
GFMCM-057	295.06	310.06	0.012	GFMCM-072	448.61	451.00	0.012
GFMCM-057	325.06	340.06	0.031	GFMCM-078	135.00	150.00	0.03
GFMCM-057	340.06	355.06	0.065	GFMCM-078	210.00	225.00	0.052
GFMCM-057	355.06	361.63	0.155	GFMCM-079	61.01	76.01	0.014
GFMCM-057	361.63	376.63	0.159	GFMCM-079	110.00	111.70	0.054
GFMCM-057	376.63	391.63	0.15	GFMCM-079	111.70	113.35	0.054
GFMCM-057	391.63	392.81	0.029	GFMCM-079	113.35	128.35	0.027
GFMCM-057	392.81	407.81	0.039	GFMCM-079	128.35	131.79	0.016
GFMCM-057	407.81	422.81	0.088	GFMCM-079	131.79	146.79	0.035
GFMCM-057	422.81	437.81	0.146	GFMCM-080	61.37	72.56	0.038
GFMCM-057	437.81	445.00	0.135	GFMCM-080	72.56	75.14	0.07
GFMCM-058	124.74	138.09	0.036	GFMCM-080	75.14	85.58	0.044
GFMCM-058	138.09	153.09	0.029	GFMCM-080	85.58	88.69	0.022
GFMCM-058	153.09	161.48	0.01	GFMCM-080	88.69	90.21	0.026
GFMCM-058	161.48	176.48	0.042	GFMCM-080	90.21	93.99	0.051
GFMCM-058	176.48	182.94	0.114	GFMCM-080	93.99	105.06	0.107
GFMCM-058	182.94	192.12	0.035	GFMCM-080	105.06	108.42	0.014
GFMCM-058	192.12	207.12	0.022	GFMCM-080	108.42	123.42	0.019
GFMCM-059	281.18	296.18	0.041	GFMCM-080	123.42	138.42	0.156
GFMCM-059	296.18	298.72	0.015	GFMCM-080	138.42	146.31	0.312
GFMCM-059	328.70	343.70	0.022	GFMCM-080	146.31	161.31	0.165
GFMCM-059	343.70	358.70	0.012	GFMCM-080	161.31	176.31	0.028
GFMCM-059	358.70	373.70	0.02	GFMCM-080	280.74	295.74	0.012
GFMCM-059	373.70	388.70	0.019	GFMCM-080	310.74	325.74	0.012
GFMCM-059	388.70	391.81	0.013	GFMCM-080	325.74	327.95	0.024
GFMCM-059	406.81	421.81	0.095	GFMCM-080	327.95	342.82	0.031
GFMCM-060	0.00	15.00	0.027	GFMCM-080	342.82	352.47	0.012
GFMCM-060	195.90	210.90	0.103	GFMCM-080	416.85	425.35	0.013
GFMCM-060	210.90	225.90	0.041	GFMCM-080	484.05	497.87	0.016
GFMCM-060	240.90	255.90	0.026	GFMCM-080	497.87	507.75	0.011
GFMCM-061	117.18	120.47	0.037	GFMCM-081	405.41	420.41	0.039
GFMCM-061	120.47	135.20	0.141	GFMCM-081	420.41	435.41	0.039
GFMCM-061	135.20	150.20	0.014	GFMCM-081	435.41	448.09	0.04
GFMCM-061	165.20	175.14	0.016	GFMCM-081	448.09	463.09	0.022
GFMCM-067	385.89	400.89	0.017	GFMCM-081	472.36	487.35	0.013
GFMCM-067	400.89	415.89	0.066	GFMCM-082	15.00	30.00	0.013
GFMCM-067	415.89	430.89	0.021	GFMCM-082	322.56	323.32	0.038
GFMCM-067	430.89	445.89	0.021	GFMCM-082	323.32	338.32	0.076
GFMCM-067	445.89	460.89	0.043	GFMCM-083	262.13	273.43	0.014
GFMCM-067	460.89	475.89	0.01	GFMCM-091	130.41	145.41	0.105
GFMCM-068	259.96	269.23	0.021	GFMCM-091	145.41	160.13	0.984
GFMCM-068	274.89	284.86	0.066	GFMCM-091	160.13	175.13	0.14
GFMCM-068	284.86	299.86	0.01	GFMCM-091	175.13	190.13	0.187
GFMCM-069	0.00	14.06	0.024	GFMCM-091	190.13	205.13	0.077
GFMCM-069	14.06	19.70	0.046	GFMCM-091	205.13	220.13	0.036

BHID	FROM	TO	AU_ORG
GFMCM-091	366.05	381.05	0.026
GFMCM-091	381.05	391.60	0.015
GFMCM-092	70.05	80.52	0.011
GFMCM-092	80.52	95.52	0.01
GFMCM-092	95.52	110.52	0.01
GFMCM-092	110.52	125.52	0.039
GFMCM-092	125.52	140.52	0.084
GFMCM-092	140.52	155.52	0.071
GFMCM-092	155.52	170.52	0.058
GFMCM-092	170.52	185.52	0.036
GFMCM-092	185.52	200.52	0.039
GFMCM-092	200.52	206.51	0.067
GFMCM-092	206.51	221.51	0.131
GFMCM-093	74.04	89.04	0.085
GFMCM-093	89.04	104.04	0.087
GFMCM-093	104.04	119.04	0.087
GFMCM-093	119.04	134.04	0.083
GFMCM-093	134.04	135.97	0.021
GFMCM-093	135.97	150.97	0.01
GFMCM-094	64.55	79.55	0.014
GFMCM-094	79.55	94.55	0.052
GFMCM-094	159.70	174.70	0.011
GFMCM-094	174.70	189.70	0.175
GFMCM-094	203.21	218.21	0.011
GFMCM-095	8.87	23.87	0.012
GFMCM-095	68.87	71.14	0.015
GFMCM-095	71.14	86.14	0.011
GFMCM-095	86.14	101.14	0.02
GFMCM-095	101.14	116.14	0.017
GFMCM-095	116.14	131.14	0.011
GFMCM-095	147.47	156.25	0.018
GFMCM-095	186.25	201.25	0.092
GFMCM-095	201.25	216.25	0.133
GFMCM-096	16.72	31.72	0.01
GFMCM-097A	57.44	72.44	0.012
GFMCM-097A	72.44	87.44	0.012
GFMCM-097A	87.44	102.44	0.047
GFMCM-097A	102.44	117.44	0.022
GFMCM-097A	117.44	120.95	0.036
GFMCM-098	37.99	48.94	0.033
GFMCM-098	48.94	63.94	0.016
GFMCM-098	63.94	78.94	0.011
GFMCM-098	78.94	87.03	0.03
GFMCM-098	87.03	91.19	0.017
GFMCM-098	91.20	99.56	0.043
GFMCM-098	99.56	114.56	0.158
GFMCM-098	114.56	117.25	0.087
GFMCM-098	117.25	132.25	0.061
GFMCM-098	132.25	132.80	0.064
GFMCM-098	132.80	147.80	0.021
GFMCM-098	263.02	278.02	0.024

BHID	FROM	TO	AU_ORG
GFMCM-099	0.00	3.18	0.012
GFMCM-099	3.18	3.94	0.012
GFMCM-099	3.94	4.32	0.012
GFMCM-099	4.32	5.87	0.011
GFMCM-099	5.87	20.87	0.019
GFMCM-099	20.87	35.87	0.012
GFMCM-099	35.87	50.87	0.015
GFMCM-099	80.87	95.87	0.011
GFMCM-099	95.87	110.87	0.011
GFMCM-099	125.00	125.64	0.016
GFMCM-099	228.12	241.39	0.01
GFMCM-100	196.24	211.24	0.017
GFMCM-100	211.24	226.24	0.042
GFMCM-100	226.24	241.24	0.039
GFMCM-100	241.24	256.24	0.025
GFMCM-100	256.24	269.58	0.012
GFMCM-100	334.71	349.71	0.018
GFMCM-101	160.50	175.50	0.011
GFMCM-101	190.50	205.50	0.01
GFMCM-101	205.50	220.50	0.015
GFMCM-101	220.50	235.50	0.026
GFMCM-101	235.50	241.85	0.022
GFMCM-101	241.85	243.86	0.023
GFMCM-101	243.86	251.94	0.045
GFMCM-101	251.94	254.29	0.1
GFMCM-101	254.29	269.29	0.207
GFMCM-101	269.29	284.29	0.131
GFMCM-101	284.29	284.95	0.073
GFMCM-101	284.95	294.60	0.022
GFMCM-101	294.60	295.00	0.027
GFMCM-102	83.48	96.23	0.023
GFMCM-102	306.53	321.53	0.016
GFMCM-102	321.53	332.46	0.024
GFMCM-102	332.46	347.46	0.075
GFMCM-102	347.46	362.46	0.088
GFMCM-102	362.46	377.46	0.084
GFMCM-102	377.46	377.67	0.118
GFMCM-102	377.67	392.67	0.024
GFMCM-103	0.00	3.00	0.018
GFMCM-103	3.00	18.00	0.031
GFMCM-103	18.00	33.00	0.022
GFMCM-103	33.00	48.00	0.103
GFMCM-103	48.00	63.00	0.014
GFMCM-103	63.00	78.00	0.015
GFMCM-103	78.00	93.00	0.021
GFMCM-103	93.00	108.00	0.015
GFMCM-103	108.00	123.00	0.02
GFMCM-103	123.00	138.00	0.019
GFMCM-103	138.00	153.00	0.023
GFMCM-103	153.00	168.00	0.011
GFMCM-103	168.00	183.00	0.011

BHID	FROM	TO	AU_ORG
GFMCM-103	183.00	198.00	0.016
GFMCM-103	198.00	208.00	0.015
GFMCM-103	208.00	223.00	0.01
GFMCM-104	282.49	297.49	0.013
GFMCM-104	297.49	298.99	0.016
GFMCM-104	313.99	328.99	0.011
GFMCM-104	404.89	419.89	0.013
GFMCM-104	419.89	434.89	0.027
GFMCM-104	434.89	449.89	0.023
GFMCM-105	105.00	114.86	0.017
GFMCM-105	114.86	129.86	0.025
GFMCM-105	207.07	222.07	0.013
GFMCM-105	222.07	223.73	0.077
GFMCM-105	223.73	238.73	0.023
GFMCM-106	276.80	291.80	0.011
GFMCM-106	350.98	365.98	0.011
GFMCM-106	398.85	413.85	0.026
GFMCM-106	413.85	420.14	0.015
GFMCM-107	0.00	14.04	0.031
GFMCM-107	14.04	29.04	0.071
GFMCM-107	29.04	44.04	0.327
GFMCM-107	44.04	59.04	0.251
GFMCM-107	59.04	74.04	0.01
GFMCM-107	168.02	181.05	0.012
GFMCM-107	229.46	242.18	0.013
GFMCM-107	242.18	244.99	0.017
GFMCM-107	284.95	299.95	0.013
GFMCM-108	235.93	250.93	0.013
GFMCM-108	250.93	265.93	0.01
GFMCM-109	0.00	1.40	0.097
GFMCM-109	1.40	16.40	0.066
GFMCM-109	16.40	31.40	0.028
GFMCM-109	31.40	46.40	0.01
GFMCM-109	132.28	139.30	0.198
GFMCM-109	139.30	154.30	0.048
GFMCM-109	212.91	221.87	0.016
GFMCM-109	221.87	230.24	0.029
GFMCM-109	230.24	239.10	0.105
GFMCM-109	239.10	249.03	0.016
GFMCM-110(	135.00	136.21	0.013
GFMCM-110(	151.21	157.80	0.02
GFMCM-110(	158.40	159.01	0.01
GFMCM-110(	159.01	174.01	0.011
GFMCM-110(	174.01	181.80	0.03
GFMCM-110(	183.00	191.96	0.01
GFMCM-110(	269.00	284.00	0.01
GFMCM-110(	308.50	310.69	0.09
GFMCM-111	8.40	19.18	0.013
GFMCM-111	414.79	423.42	0.017
GFMCM-111	423.42	438.42	0.016
GFMCM-111	468.42	483.42	0.011

BHID	FROM	TO	AU_ORG
GFMCM-111	483.42	498.01	0.05
GFMCM-111	498.01	511.69	0.05
GFMCM-111	511.69	526.69	0.05
GFMCM-111	526.69	541.69	0.048
GFMCM-111	541.69	556.69	0.053
GFMCM-111	556.69	571.69	0.032
GFMCM-111	571.69	573.22	0.013
GFMCM-112	74.93	85.67	0.055
GFMCM-112	99.34	108.88	0.015
GFMCM-112	266.86	271.53	0.034
GFMCM-112	271.53	286.53	0.027
GFMCM-112	286.53	301.53	0.076
GFMCM-112	301.53	316.53	0.041
GFMCM-112	316.53	331.53	0.501
GFMCM-112	331.53	346.53	0.128
GFMCM-112	346.53	361.53	0.052
GFMCM-112	361.53	376.53	0.068
GFMCM-112	376.54	376.64	0.063
GFMCM-112	376.64	391.64	0.018
GFMCM-113	82.17	97.17	0.01
GFMCM-113	154.05	169.05	0.012
GFMCM-113	247.32	258.58	0.012
GFMCM-113	303.85	318.85	0.015
GFMCM-113	318.85	325.59	0.012
GFMCM-114	419.79	434.79	0.011
GFMCM-114	434.79	441.61	0.012
GFMCM-114	441.61	456.61	0.01
GFMCM-114	456.61	471.61	0.043
GFMCM-114	471.61	486.61	0.095
GFMCM-114	486.61	501.61	0.335
GFMCM-114	501.61	516.61	0.133
GFMCM-114	516.61	531.61	0.093
GFMCM-114	531.61	546.61	0.042
GFMCM-114	546.61	552.85	0.042
GFMCM-114	552.85	567.85	0.045
GFMCM-114	567.85	582.85	0.03
GFMCM-114	582.85	597.85	0.036
GFMCM-114	597.85	600.00	0.016
GFMCM-115	18.02	29.80	0.012
GFMCM-115	29.80	44.80	0.014
GFMCM-115	44.80	59.80	0.027
GFMCM-115	59.80	74.80	0.012
GFMCM-115	74.80	89.80	0.018
GFMCM-115	104.80	119.80	0.024
GFMCM-115	119.80	134.80	0.039
GFMCM-115	134.80	143.40	0.025
GFMCM-115	228.45	243.45	0.022
GFMCM-115	243.45	244.63	0.063
GFMCM-115	244.63	253.92	0.014
GFMCM-116	119.26	134.26	0.011
GFMCM-116	134.26	149.26	0.047

BHID	FROM	TO	AU_ORG
GFMCM-116	149.26	164.26	0.02
GFMCM-116	222.60	237.60	0.026
GFMCM-116	237.60	240.73	0.04
GFMCM-116	416.32	425.73	0.03
GFMCM-117	15.00	30.00	0.018
GFMCM-119	84.72	99.72	0.018
GFMCM-119	99.72	114.10	0.02
GFMCM-119	153.57	168.57	0.01
GFMCM-119	305.33	307.20	0.016
GFMCM-121	158.11	165.51	0.013
GFMCM-123(	184.19	199.19	0.032
GFMCM-123(	199.19	214.19	0.013
GFMCM-123(	235.31	250.31	0.012
GFMCM-125	66.60	81.60	0.016
GFMCM-125	111.60	126.60	0.012
GFMCM-125	186.60	201.60	0.033
GFMCM-125	216.60	221.24	0.019
GFMCM-125	221.24	227.79	0.023
GFMCM-125	227.79	242.52	0.034
GFMCM-125	242.52	257.52	0.07
GFMCM-125	257.52	261.35	0.032
GFMCM-125	261.35	276.35	0.018
GFMCM-127	134.60	148.43	0.017
GFMCM-127	309.44	324.44	0.011
GFMCM-129	327.49	342.49	0.028
GFMCM-129	342.49	357.49	0.017
GFMCM-129	357.49	372.49	0.032
GFMCM-129	402.49	417.49	0.052
GFMCM-129	417.49	432.49	0.031
GFMCM-129	432.49	445.00	0.026
GFMCM-131	69.76	84.76	0.012
GFMCM-131	84.79	96.97	0.013
GFMCM-131	117.41	132.41	0.012
GFMCM-131	143.63	158.63	0.015
GFMCM-133	40.00	55.00	0.013
GFMCM-133	90.82	105.82	0.014
GFMCM-133	105.82	108.43	0.072
GFMCM-133	108.43	121.85	0.042
GFMCM-135(	124.43	139.43	0.013
GFMCM-135(	139.43	150.50	0.047
GFMCM-135(	155.20	159.00	0.073
GFMCM-135(	161.30	176.30	0.065
GFMCM-135(	176.30	191.30	0.051
GFMCM-135(	191.30	206.30	0.038
GFMCM-135(	206.30	221.30	0.025
GFMCM-135(	221.30	226.24	0.017
GFMCM-137	15.48	27.16	0.026
GFMCM-137	122.13	133.16	0.016
GFMCM-137	148.16	163.16	0.014
GFMCM-137	163.16	170.32	0.016
GFMCM-139	129.42	140.86	0.011

BHID	FROM	TO	AU_ORG
GFMCM-139	140.86	155.86	0.026
GFMCM-139	258.84	271.71	0.014
GFMCM-144	120.00	132.41	0.136
GFMCM-144	132.41	147.41	0.226
GFMCM-144	147.41	156.41	0.183
GFMCM-144	156.41	171.41	0.038
GFMCM-144	171.41	186.41	0.011
GFMCM-144	284.12	299.12	0.01
GFMCM-144	304.23	319.23	0.086
GFMCM-144	319.23	332.09	0.013
GFMCM-145	0.00	15.00	0.012
GFMCM-145	45.00	60.00	0.013
GFMCM-145	60.00	66.07	0.014
GFMCM-145	68.04	74.26	0.015
GFMCM-145	74.26	76.21	0.018
GFMCM-145	76.21	91.21	0.024
GFMCM-145	91.21	106.21	0.013
GFMCM-146	172.56	181.84	0.013
GFMCM-146	181.84	196.84	0.012
GFMCM-146	226.84	238.85	0.01
GFMCM-147	30.67	45.67	0.015
GFMCM-147	45.67	60.67	0.028
GFMCM-147	60.67	74.85	0.098
GFMCM-147	74.85	82.15	0.339
GFMCM-147	82.15	89.59	0.024
GFMCM-148	132.54	146.97	0.633
GFMCM-148	146.97	161.97	0.095
GFMCM-148	161.97	168.60	0.124
GFMCM-148	168.60	183.60	0.013
GFMCM-148	229.56	243.38	0.018
GFMCM-149	15.39	30.39	0.018
GFMCM-149	30.39	45.39	0.014
GFMCM-149	60.39	64.25	0.015
GFMCM-149	128.87	143.87	0.013
GFMCM-149	158.87	173.87	0.01
GFMCM-149	173.87	188.87	0.012
GFMCM-149	188.87	203.87	0.034
GFMCM-149	203.87	218.87	0.01
GFMCM-149	218.87	233.87	0.014
GFMCM-149	233.87	243.50	0.012
GFMCM-149	243.50	258.50	0.01
GFMCM-149	280.48	295.48	0.017
GFMCM-149	295.48	303.77	0.02
GFMCM-149	343.55	356.96	0.01
GFMCM-150	23.64	38.64	0.025
GFMCM-150	38.64	39.20	0.033
GFMCM-153	624.56	633.68	0.013
GFMCM-153	648.68	663.68	0.031
GFMCM-153	663.68	678.68	0.013
GFMCM-153	678.68	693.68	0.164
GFMCM-154	175.87	190.87	0.012

BHID	FROM	TO	AU_ORG
GFMCM-154	479.85	494.85	0.029
GFMCM-154	494.85	509.85	0.036
GFMCM-154	509.85	524.85	0.013
GFMCM-154	524.85	539.85	0.346
GFMCM-154	539.85	554.85	0.026
GFMCM-154	554.85	569.85	0.029
GFMCM-154	569.85	573.05	0.014
GFMCM-154	603.64	618.64	0.024
GFMCM-154	618.64	620.83	0.036
GFMCM-154	620.83	621.37	0.076
GFMCM-154	621.37	636.37	0.024
GFMCM-155	526.03	541.03	0.01
GFMCM-157	473.44	488.44	0.01
GFMCM-158	303.45	318.45	0.012
GFMCM-158	326.61	328.03	0.012
GFMCM-158	328.03	329.58	0.012
GFMCM-158	523.13	536.58	0.011
GFMCM-159	521.91	536.91	0.01
GFMCM-160	561.63	576.63	0.017
GFMCM-160	576.63	589.90	0.012
GFMCM-161	414.08	429.08	0.013
GFMCM-161	446.57	461.57	0.017
GFMCM-161	461.57	476.57	0.014
GFMCM-163	147.33	162.32	0.011
GFMCM-163	207.32	211.56	0.017
GFMCM-163	211.56	214.22	0.045
GFMCM-163	214.22	229.22	0.074
GFMCM-163	405.93	420.93	0.011
GFMCM-163	435.93	450.93	0.045
GFMCM-163	450.93	453.09	0.063
GFMCM-163	453.09	468.09	0.027
GFMCM-163	468.09	483.09	0.025
GFMCM-163	483.09	498.09	0.014
GFMCM-164	247.80	260.80	0.037
GFMCM-164	260.80	275.80	0.038
GFMCM-164	275.80	290.80	0.193
GFMCM-164	290.80	305.80	0.072
GFMCM-164	305.80	320.80	0.19
GFMCM-164	320.80	335.80	0.399
GFMCM-164	335.80	350.80	1.495
GFMCM-164	350.80	351.99	1
GFMCM-164	351.99	366.99	0.253
GFMCM-164	366.99	381.99	0.016
GFMCM-164	381.99	393.59	0.026
GFMCM-165	203.82	218.82	0.205
GFMCM-165	218.82	233.82	0.189
GFMCM-165	233.82	248.82	0.031
GFMCM-165	248.82	263.82	0.052
GFMCM-165	263.82	273.51	0.037
GFMCM-165	273.51	288.51	0.014
GFMCM-166	100.27	115.27	0.018

BHID	FROM	TO	AU_ORG
GFMCM-166	115.27	130.00	0.013
GFMCM-166	135.00	150.00	0.024
GFMCM-166	180.02	195.02	0.017
GFMCM-166	195.02	210.02	0.028
GFMCM-166	210.02	225.02	0.013
GFMCM-167	52.84	67.84	0.034
GFMCM-167	67.84	82.84	0.023
GFMCM-167	82.84	97.84	0.019
GFMCM-167	97.84	112.84	0.023
GFMCM-167	366.40	381.40	0.017
GFMCM-167	503.76	518.76	0.019
GFMCM-167	518.76	518.93	0.02
GFMCM-167	518.93	533.93	0.018
GFMCM-167	533.93	548.93	0.022
GFMCM-167	548.93	555.00	0.029
GFMCM-168	97.57	112.57	0.013
GFMCM-168	251.00	256.99	0.013
GFMCM-168	256.99	271.99	0.037
GFMCM-168	271.99	286.99	0.011
GFMCM-168	301.99	314.81	0.013
GFMCM-169	0.00	15.00	0.01
GFMCM-169	144.00	159.00	0.01
GFMCM-169	193.09	208.09	0.015
GFMCM-169	300.95	315.95	0.025
GFMCM-169	315.95	330.95	0.187
GFMCM-169	330.95	345.95	0.075
GFMCM-169	345.95	360.95	0.038
GFMCM-169	363.30	378.30	0.023
GFMCM-169	438.30	453.30	0.01
GFMCM-169	477.21	492.21	0.029
GFMCM-169	492.21	506.00	0.079
GFMCM-169	506.00	521.00	0.013
GFMCM-169	572.05	587.05	0.014
GFMCM-169	587.05	602.05	0.024
GFMCM-169	602.05	617.05	0.041
GFMCM-169	617.05	632.05	0.017
GFMCM-170	224.04	239.04	0.011
GFMCM-170	299.04	314.04	0.073
GFMCM-171	525.00	525.92	0.023
GFMCM-171	525.92	537.82	0.014
GFMCM-171	582.82	596.64	0.011
GFMCM-171	596.64	596.81	0.01
GFMCM-173	16.74	31.74	0.017
GFMCM-173	31.74	44.64	0.055
GFMCM-173	153.91	168.64	0.028
GFMCM-173	168.64	179.44	0.01
GFMCM-173	359.90	374.90	0.102
GFMCM-173	374.90	389.90	0.021
GFMCM-173	434.90	449.90	0.013
GFMCM-173	449.90	464.90	0.027
GFMCM-173	464.90	479.90	0.108

BHID	FROM	TO	AU_ORG
GFMCM-173	479.90	494.90	0.042
GFMCM-173	494.90	509.90	0.107
GFMCM-173	509.90	523.25	0.098
GFMCM-173	523.25	538.25	0.017
GFMCM-174	127.69	142.69	0.023
GFMCM-174	142.69	157.69	0.014
GFMCM-174	415.01	425.67	0.011
GFMCM-174	550.90	565.90	0.02
GFMCM-174	565.90	580.90	0.022
GFMCM-174	580.90	595.90	0.014
GFMCM-174	595.90	610.90	0.016
GFMCM-175	107.90	122.90	0.017
GFMCM-175	122.90	125.94	0.037
GFMCM-175	266.84	278.93	0.01
GFMCM-175	278.93	293.93	0.011
GFMCM-176	136.62	151.62	0.935
GFMCM-176	151.62	155.88	1.223
GFMCM-176	155.88	157.76	0.631
GFMCM-176	157.76	172.76	0.177
GFMCM-176	217.76	232.76	0.031
GFMCM-176	232.76	239.29	0.022
GFMCM-176	308.54	323.53	0.01
GFMCM-176	335.26	350.26	0.031
GFMCM-176	350.26	365.26	0.012
GFMCM-176	380.26	395.26	0.021
GFMCM-176	395.26	401.77	0.011
GFMCM-176	421.57	436.57	0.183
GFMCM-176	436.57	437.67	0.02
GFMCM-176	471.60	486.60	0.011
GFMCM-176	486.60	501.00	0.036
GFMCM-176	515.64	530.64	0.014
GFMCM-177	310.54	325.54	0.01
GFMCM-177	345.15	360.15	0.01
GFMCM-177	514.92	516.12	0.01
GFMCM-177	551.35	566.35	0.012
GFMCM-177	566.35	581.35	0.043
GFMCM-177	581.35	587.49	0.045
GFMCM-177	587.49	594.90	0.035
GFMCM-178	28.71	43.71	0.011
GFMCM-178	43.71	58.71	0.052
GFMCM-178	58.71	64.83	0.06
GFMCM-178	494.55	509.55	0.014
GFMCM-178	509.55	524.55	0.099
GFMCM-178	524.55	539.55	0.043
GFMCM-178	619.89	634.89	0.012
GFMCM-179	500.12	515.12	0.01
GFMCM-179	515.12	530.12	0.055
GFMCM-179	575.93	590.93	0.011
GFMCM-180	148.58	156.31	0.019
GFMCM-180	156.31	171.31	0.077
GFMCM-180	171.31	180.84	0.045

BHID	FROM	TO	AU_ORG
GFMCM-181	227.82	242.82	0.017
GFMCM-181	242.82	253.04	0.011
GFMCM-182	23.52	38.52	0.036
GFMCM-182	38.52	51.77	0.011
GFMCM-182	228.33	243.33	0.237
GFMCM-182	243.33	250.82	0.069
GFMCM-182	318.86	333.86	0.01
GFMCM-182	333.86	347.11	0.028
GFMCM-183	120.00	135.00	0.013
GFMCM-183	135.00	150.00	0.011
GFMCM-184	59.54	74.54	0.019
GFMCM-184	89.52	99.19	0.308
GFMCM-184	99.19	114.19	0.05
GFMCM-184	164.41	169.54	0.016
GFMCM-184	210.12	214.68	0.015
GFMCM-185	60.00	75.00	0.126
GFMCM-185	75.00	90.00	0.082
GFMCM-185	150.00	165.00	0.01
GFMCM-185	180.00	195.00	0.045
GFMCM-185	195.00	210.00	0.02
GFMCM-186	194.74	209.41	0.101
GFMCM-186	209.41	224.41	0.024
GFMCM-186	239.41	254.41	0.019
GFMCM-186	259.23	267.77	0.073
GFMCM-186	267.77	282.77	0.016
GFMCM-186	297.77	312.77	0.018
GFMCM-188	91.98	106.98	0.081
GFMCM-188	161.82	165.65	0.028
GFMCM-188	165.65	172.56	0.139
GFMCM-188	172.56	186.34	0.036
GFMCM-190	0.00	15.00	0.073
GFMCM-191	65.45	80.45	0.091
GFMCM-192	0.00	15.00	0.042
GFMCM-192	105.00	120.00	0.022
GFMCM-192	124.46	139.46	0.033
GFMCM-192	139.46	143.16	0.01
GFMCM-192	188.16	196.90	0.41
GFMCM-192	196.90	211.90	0.064
GFMCM-193	75.00	90.00	0.014
GFMCM-194	65.34	79.50	0.044
GFMCM-195	60.00	75.00	0.015
GFMCM-196	105.12	120.12	0.018
GFMCM-197	75.45	80.48	0.016
GFMCM-198	19.19	34.19	0.01
GFMCM-198	34.19	45.22	0.014
GFMCM-198	158.96	165.61	0.079
GFMCM-199	12.29	26.90	0.104
GFMCM-199	26.90	41.90	0.02
GFMCM-199	49.78	64.78	0.023
GFMCM-199	64.78	79.78	0.036
GFMCM-200	19.93	34.93	0.047

BHID	FROM	TO	AU_ORG
GFMCM-200	34.93	49.93	0.045
GFMCM-200	49.93	60.01	0.038
GFMCM-202	49.10	64.10	0.025
GFMCM-202	64.10	69.87	0.034
GFMCM-203	96.33	111.33	0.017
GFMCM-204	159.99	174.64	0.012
GFMCM-207	90.00	99.84	0.03
GFMCM-207	105.24	116.99	0.01
GFMCM-207	116.99	127.20	0.01
GFMCM-208	154.24	167.33	0.01
GFMCM-209	94.30	107.94	0.015
GFMCM-209	185.75	200.00	0.012
GFMCM-210	99.95	113.03	0.042
GFMCM-210	113.03	128.03	0.013
GFMCM-211	63.77	78.44	0.01
GFMCM-211	142.61	157.61	0.029
GFMCM-211	157.61	162.29	0.01
GFMCM-211	162.29	170.29	0.011
GFMCM-213	139.75	148.26	0.046
GFMCM-213	148.26	153.17	0.01
GFMCM-215	36.37	51.24	0.011
GFMCM-215	51.24	66.24	0.039
GFMCM-215	66.24	71.47	0.049
GFMCM-215	71.47	84.74	0.016
GFMCM-215	84.74	99.74	0.018
GFMCM-217	10.96	25.96	0.012
GFMCM-217	25.96	28.46	0.075
GFMCM-217	28.46	36.44	0.035
GFMCM-217	66.44	81.44	0.026
GFMCM-217	96.44	111.44	0.013
GFMCM-218	0.00	15.00	0.018
GFMCM-218	172.67	187.67	0.016
GFMCM-219	0.00	15.00	0.011
GFMCM-219	15.00	30.00	0.015
GFMCM-219	30.00	45.00	0.01
GFMCM-219	45.00	60.00	0.014
GFMCM-219	60.00	64.21	0.015
GFMCM-219	64.21	70.46	0.012
GFMCM-220	71.53	85.08	0.01
GFMCM-220	154.26	169.26	0.013
GFMCM-220	169.26	176.42	0.021
GFMCM-221	91.02	98.72	0.09
GFMCM-221	98.72	101.18	0.066
GFMCM-222	156.68	165.15	0.01
GFMCM-222	165.15	176.25	0.112
GFMCM-223	180.00	195.00	0.01
GFMCM-224	495.45	498.89	0.013
GFMCM-224	610.91	622.79	0.017
GFMCM-224	622.79	629.43	0.014
GFMCM-225	0.00	15.00	0.154
GFMCM-225	148.31	163.31	0.056

BHID	FROM	TO	AU_ORG
GFMCM-225	163.31	178.31	0.052
GFMCM-225	178.31	190.40	0.018
GFMCM-225	190.40	199.54	0.01
GFMCM-225	500.83	515.83	0.022
GFMCM-225	515.83	530.83	0.011
GFMCM-225	563.25	578.25	0.011
GFMCM-225	578.25	593.25	0.021
GFMCM-225	593.25	593.96	0.013
GFMCM-225	593.96	608.96	0.028
GFMCM-225	608.96	623.96	0.018
GFMCM-225	623.96	630.00	0.013
GFMCM-226	0.00	15.00	0.011
GFMCM-226	399.08	414.08	0.026
GFMCM-226	414.08	418.69	0.023
GFMCM-227	0.00	15.00	0.078
GFMCM-227	72.12	87.12	0.025
GFMCM-227	87.12	96.09	0.04
GFMCM-227	96.09	111.09	0.026
GFMCM-228	99.92	109.30	0.036
GFMCM-228	109.30	124.28	0.026
GFMCM-228	183.36	198.36	0.02
GFMCM-229	52.58	67.58	0.018
GFMCM-230	0.00	15.00	0.02
GFMCM-230	15.00	30.00	0.01
GFMCM-231	56.94	71.94	0.021
GFMCM-231	90.21	105.21	0.017
GFMCM-231	105.21	106.98	0.043
GFMCM-231	106.98	121.98	0.01
GFMCM-232	88.34	91.15	0.01
GFMCM-232	91.15	98.38	0.012
GFMCM-232	98.38	113.38	0.021
GFMCM-232	113.38	128.38	0.01
GFMCM-232	128.38	143.38	0.013
GFMCM-234	0.00	5.00	0.028
GFMCM-234	5.00	10.18	0.024
GFMCM-234	10.18	25.18	0.034
GFMCM-234	42.11	57.11	0.15
GFMCM-235	0.00	6.83	0.021
GFMCM-235	48.66	63.66	0.023
GFMCM-235	63.66	68.63	0.019
GFMCM-236	45.03	60.03	0.013
GFMCM-236	60.03	75.03	0.012
GFMCM-236	75.03	79.63	0.012
GFMCM-237	29.69	33.13	0.063
GFMCM-237	33.13	43.16	0.027
GFMCM-238	137.30	144.43	0.012
GFMCM-240	39.43	45.80	0.04
GFMCM-240	51.25	66.25	0.038
GFMCM-240	66.25	69.36	0.333
GFMCM-240	69.36	75.30	0.05
GFMCM-240	75.30	90.30	0.018

BHID	FROM	TO	AU_ORG
GFMCM-241	16.12	31.12	0.011
GFMCM-241	46.12	59.96	0.026
GFMCM-241	85.09	85.41	0.012
GFMCM-242	118.40	130.69	0.011
GFMCM-242	130.69	145.69	0.063
GFMCM-242	145.69	160.69	0.018
GFMCM-242	160.69	175.69	0.183
GFMCM-242	175.69	185.11	0.032
GFMCM-242	185.11	195.20	0.028
GFMCM-243	80.68	95.68	0.02
GFMCM-243	115.00	116.73	0.05
GFMCM-243	116.73	131.73	0.029
GFMCM-243	131.73	144.62	0.019
GFMCM-244	47.31	62.31	0.021
GFMCM-244	81.99	90.36	0.095
GFMCM-245	14.79	29.79	0.011
GFMCM-245	29.79	36.65	0.085
GFMCM-245	51.65	66.65	0.024
GFMCM-245	66.65	81.65	0.031
GFMCM-245	81.65	86.32	0.02
GFMCM-246	186.93	198.57	0.52
GFMCM-246	198.57	213.57	0.156
GFMCM-246	213.57	228.57	0.012
GFMCM-246	243.57	258.57	0.015
GFMCM-247	0.00	3.41	0.062
GFMCM-247	3.41	18.41	0.014
GFMCM-247	20.44	35.44	0.01
GFMCM-247	35.44	50.44	0.272
GFMCM-247	71.41	86.41	0.018
GFMCM-247	86.41	101.41	0.017
GFMCM-247	131.41	146.41	0.012
GFMCM-247	161.41	176.41	0.026
GFMCM-247	176.41	184.21	0.031
GFMCM-248	111.59	126.59	0.029
GFMCM-248	234.41	249.41	0.029
GFMCM-249	113.06	125.00	0.036
GFMCM-249	125.00	140.00	0.029
GFMCM-249	200.00	215.00	0.042
GFMCM-250	257.67	272.67	0.063
GFMCM-250	272.67	286.85	0.04
GFMCM-251	67.88	82.88	0.016
GFMCM-251	97.88	112.88	0.01
GFMCM-251	235.49	250.49	0.028
GFMCM-251	250.49	262.95	0.015
GFMCM-252	80.34	94.39	0.079
GFMCM-252	94.39	109.39	0.102
GFMCM-252	109.40	113.65	0.076
GFMCM-252	113.65	128.65	0.014
GFMCM-252	174.06	189.06	0.01
GFMCM-253	210.18	225.18	0.017
GFMCM-253	225.18	240.18	0.053
GFMCM-253	240.18	252.07	0.02
GFMCM-253	252.07	255.00	0.033
GFMCM-254	218.12	229.72	0.032
GFMCM-255	297.88	298.37	0.01
GFMCM-255	298.37	313.37	0.066
GFMCM-255	341.13	356.13	0.012
GFMCM-255	356.13	363.53	0.021
GFMCM-257	107.55	122.55	0.015
GFMCM-257	189.69	200.53	0.066
GFMCM-257	277.05	292.05	0.263
GFMCM-257	292.05	300.32	0.067
GFMCM-257	328.25	343.25	0.019
GFMCM-257	356.44	369.35	0.023
GFMCM-258	214.67	226.62	0.137
GFMCM-259	363.43	363.72	0.029
GFMCM-259	439.31	454.31	0.025
GFMCM-259	467.27	482.27	0.023
GFMCM-259	482.27	497.27	0.222
GFMCM-259	497.27	512.27	0.016
GFMCM-260	299.52	314.52	0.016
GFMCM-260	362.34	369.24	0.01
GFMCM-261	128.68	141.44	0.068
GFMCM-261	390.86	402.17	0.013
GFMCM-261	447.17	462.17	0.018
GFMCM-262	373.90	388.90	0.593
GFMCM-262	388.90	403.90	0.254
GFMCM-262	403.90	406.74	0.071
GFMCM-262	406.74	421.74	0.05
GFMCM-262	421.74	436.74	0.029
GFMCM-262	436.74	451.74	0.015
GFMCM-262	451.74	465.00	0.013
GFMCM-263	299.72	314.72	0.104
GFMCM-263	314.72	329.03	0.322
GFMCM-263	329.03	344.03	0.134
GFMCM-263	344.03	359.03	0.016
GFMCM-264	481.38	496.38	0.045
GFMCM-264	496.38	511.38	0.142
GFMCM-264	511.38	515.59	0.012
GFMCM-264	515.59	530.00	0.019
GFMCM-265	54.96	65.28	0.058
GFMCM-265	74.47	86.41	0.024
GFMCM-265	86.41	101.41	0.015
GFMCM-266	308.60	311.93	0.018
GFMCM-266	311.93	326.93	0.019
GFMCM-266	485.82	500.82	0.015
GFMCM-267	108.05	123.05	0.018
GFMCM-267	168.87	183.87	0.062
GFMCM-267	183.87	184.47	0.13
GFMCM-267	184.47	199.47	0.012
GFMCM-267	203.78	210.37	0.047
GFMCM-267	315.37	330.37	0.01

BHID	FROM	TO	AU_ORG
GFMCM-268	0.00	15.00	0.018
GFMCM-269	0.00	4.94	0.519
GFMCM-269	4.94	19.94	0.08
GFMCM-269	295.08	310.08	0.01
GFMCM-270	208.12	223.12	0.01
GFMCM-270	324.26	339.26	0.053
GFMCM-270	339.26	354.26	0.074
GFMCM-270	354.26	369.26	0.025
GFMCM-270	369.26	372.41	0.02
GFMCM-271	0.00	15.00	0.03
GFMCM-271	214.22	222.96	0.042
GFMCM-271	246.79	258.24	0.013
GFMCM-272	582.11	597.11	0.012
GFMCM-274	0.00	15.00	0.014
GFMCM-275	0.00	15.00	0.017
GFMCM-275	117.66	132.66	0.014
GFMCM-275	154.64	167.83	0.132
GFMCM-275	167.83	182.83	0.013
GFMCM-276	181.59	196.59	0.014
GFMCM-276	196.59	205.44	0.011
GFMCM-277	65.56	80.56	0.028
GFMCM-277	80.56	92.04	0.06
GFMCM-278	158.51	173.51	0.037
GFMCM-278	173.51	173.82	0.022
GFMCM-278	312.39	322.54	0.012
GFMCM-280	508.07	523.07	0.035
GFMCM-280	523.07	527.56	0.038
GFMCM-281	297.79	312.79	0.021
GFMCM-281	312.79	327.79	0.037
GFMCM-281	327.79	329.95	0.01
GFMCM-282	138.24	144.53	0.065
GFMCM-282	180.02	191.44	0.046
GFMCM-282	199.46	211.84	0.01
GFMCM-282	295.51	300.00	0.062
GFMCM-283	53.53	63.92	0.051
GFMCM-283	63.92	71.30	0.048
GFMCM-283	71.30	78.64	0.024
GFMCM-283	78.64	85.16	0.299
GFMCM-283	85.16	100.16	0.05
GFMCM-283	100.16	115.16	0.011
GFMCM-283	155.68	170.68	0.014
GFMCM-283	170.68	185.68	0.011
GFMCM-283	200.68	215.68	0.01
GFMCM-283	215.68	230.68	0.012
GFMCM-283	230.68	245.68	0.012
GFMCM-284	95.94	101.86	0.01
GFMCM-286	302.03	317.03	0.025
GFMCM-286	317.03	332.03	0.119
GFMCM-286	332.03	347.03	0.053
GFMCM-286	347.03	358.12	0.024
GFMCM-286	358.12	373.12	0.014

BHID	FROM	TO	AU_ORG
GFMCM-286	373.12	388.12	0.011
GFMCM-286	470.24	485.24	0.01
GFMCM-286	519.75	534.75	0.023
GFMCM-286	549.75	564.75	0.014
GFMCM-287	373.99	384.97	0.077
GFMCM-287	384.97	399.97	0.075
GFMCM-287	399.97	414.97	0.083
GFMCM-287	414.97	429.97	0.034
GFMCM-287	429.97	444.97	0.046
GFMCM-287	444.97	459.97	0.015
GFMCM-287	463.96	478.96	0.019
GFMCM-287	513.34	528.34	0.293
GFMCM-287	528.34	543.34	0.034
GFMCM-287	543.34	555.37	0.034
GFMCM-287	580.68	594.26	0.02
GFMCM-287	594.26	609.26	0.023
GFMCM-287	609.26	624.26	0.011
GFMCM-287	654.26	663.46	0.02
GFMCM-287	663.46	665.00	0.028
GFMCM-288	582.41	597.41	0.076
GFMCM-288	597.41	610.38	0.016
GFMCM-289	0.00	15.00	0.025
GFMCM-289	60.00	62.62	0.011
GFMCM-290	56.12	71.12	0.01
GFMCM-290	86.12	91.60	0.016
GFMCM-290	91.60	106.60	0.031
GFMCM-290	106.60	121.60	0.013
GFMCM-290	121.60	136.60	0.017
GFMCM-290	345.42	360.42	0.024
GFMCM-290	360.42	375.42	0.144
GFMCM-290	672.64	687.64	0.01
GFMCM-291	557.13	571.40	0.011
GFMCM-293	240.68	254.28	0.015
GFMCM-293	378.84	393.84	0.011
GFMCM-293	393.84	408.84	0.012
GFMCM-293	423.84	424.44	0.013
GFMCM-293	424.44	439.44	0.066
GFMCM-295	47.31	55.17	0.016
GFMCM-295	70.16	81.60	0.013
GFMCM-296	73.45	88.45	0.01
GFMCM-298	0.00	15.00	0.161
GFMCM-298	15.00	29.05	0.015
GFMCM-298	59.89	74.89	0.011
GFMCM-298	149.89	164.00	0.015
GFMCM-299	61.60	76.60	0.027
GFMCM-299	76.60	78.72	0.06
GFMCM-299	78.72	93.72	0.063
GFMCM-299	93.72	93.73	0.036
GFMCM-300	234.34	249.34	0.047
GFMCM-300	249.34	264.34	0.012
GFMCM-300	264.34	268.85	0.012

BHID	FROM	TO	AU_ORG
GFMCM-300	268.85	283.85	0.01
GFMCM-300	297.05	312.05	0.014
GFMCM-302	330.59	340.43	0.017
GFMCM-302	340.43	348.40	0.022
GFMCM-303	282.90	293.20	0.047
GFMCM-303	293.20	298.75	0.017
GFMCM-304	0.00	15.00	0.018
GFMCM-304	205.37	220.37	0.029
GFMCM-304	220.37	220.55	0.016
GFMCM-305	0.00	15.00	0.017
GFMCM-305	213.74	228.74	0.025
GFMCM-305	228.74	243.74	0.011
GFMCM-307	0.00	15.00	0.03
GFMCM-307	518.08	533.08	0.018
GFMCM-307	533.08	535.59	0.067
GFMCM-307	535.59	544.86	0.034
GFMCM-307	544.86	559.86	0.022
GFMCM-307	559.86	574.86	0.01
GFMCM-307	574.86	589.86	0.02
GFMCM-307	589.86	601.07	0.033
GFMCM-308	0.00	15.00	0.051
GFMCM-308	184.64	199.64	0.015
GFMCM-308	248.70	256.71	0.011
GFMCM-308	375.99	390.99	0.01
GFMCM-309	110.66	119.81	0.018
GFMCM-309	119.81	134.81	0.01
GFMCM-310	104.50	119.50	0.019
GFMCM-310	119.50	124.22	0.02
GFMCM-311	70.72	85.72	0.048
GFMCM-311	85.72	96.99	0.19
GFMCM-311	96.99	108.41	0.024
GFMCM-312	677.70	692.70	0.013
GFMCM-312	692.70	707.70	0.012
GFMCM-313	615.80	627.49	0.04
GFMCM-314	576.90	591.90	0.331
GFMCM-314	591.90	606.90	0.052
GFMCM-314	606.90	615.67	0.013
GFMCM-316	57.09	72.09	0.013
GFMCM-317	15.00	24.01	0.01
GFMCM-318	124.87	139.58	0.029
GFMCM-318	182.65	197.65	0.012
GFMCM-319	66.46	81.46	0.017
GFMCM-319	81.46	96.46	0.235
GFMCM-319	126.46	141.46	0.021
GFMCM-319	579.88	594.88	0.039
GFMCM-319	594.88	609.88	0.042
GFMCM-320	83.29	98.29	0.012
GFMCM-320	276.25	291.25	0.016
GFMCM-320	291.25	306.25	0.015
GFMCM-321(	0.00	15.00	0.081
GFMCM-321(	15.00	20.80	0.026
GFMCM-322C	180.30	195.30	0.016
GFMCM-322C	210.30	225.30	0.012
GFMCM-322C	233.97	248.97	0.046
GFMCM-322C	248.97	263.97	0.063
GFMCM-322C	263.97	268.17	0.023
GFMCM-322C	268.17	283.17	0.065
GFMCM-322C	283.17	298.17	1.007
GFMCM-322C	298.17	313.17	0.211
GFMCM-322C	313.17	318.09	0.187
GFMCM-322C	318.09	329.96	0.03
GFMCM-322C	329.96	344.96	0.047
GFMCM-323C	57.25	72.25	0.02
GFMCM-323C	72.25	86.80	0.022
GFMCM-323C	86.80	91.21	0.026
GFMCM-323C	91.21	97.13	0.085
GFMCM-323C	97.13	101.94	0.164
GFMCM-323C	101.94	113.25	0.202
GFMCM-323C	113.25	116.85	0.195
GFMCM-323C	116.85	129.64	0.081
GFMCM-323C	129.63	133.67	0.064
GFMCM-323C	133.67	135.37	0.058
GFMCM-323C	135.37	149.36	0.02
GFMCM-324C	38.34	49.67	0.047
GFMCM-324C	49.67	64.67	0.025
GFMCM-324C	68.87	71.43	0.012
GFMCM-324C	71.43	77.11	0.015
GFMCM-324C	77.11	81.86	0.021
GFMCM-324C	81.86	84.94	0.03
GFMCM-324C	84.94	95.20	0.019
GFMCM-324C	98.10	101.55	0.013
GFMCM-324C	101.56	113.16	0.041
GFMCM-324C	116.43	131.43	0.145
GFMCM-324C	131.43	146.43	0.151
GFMCM-324C	146.43	161.43	0.263
GFMCM-324C	161.43	171.06	0.018
GFMCM-326	182.38	197.38	0.043
GFMCM-326	197.38	212.38	0.013
GFMCM-326	212.38	220.26	0.012
GFMCM-326	433.15	448.15	0.043
GFMCM-326	448.14	454.38	0.07
GFMCM-326	454.38	458.90	0.02
GFMCM-326	458.90	465.00	0.01
GFMCM-327	428.45	443.45	0.022
GFMCM-327	443.45	452.69	0.014
GFMCM-328	461.32	462.52	0.018
GFMCM-329	196.10	211.10	0.016
GFMCM-330	116.81	131.81	0.013
GFMCM-330	131.81	146.81	0.06
GFMCM-330	146.81	161.81	0.016
GFMCM-331	113.33	123.93	0.031
GFMCM-331	123.93	138.93	0.017

BHID	FROM	TO	AU_ORG	BHID	FROM	TO	AU_ORG
GFMCM-332	21.58	36.58	0.014	GFMCM-343	372.32	380.07	0.074
GFMCM-332	36.58	48.91	0.022	GFMCM-344	34.19	49.19	0.012
GFMCM-332	48.91	51.47	0.014	GFMCM-344	254.80	269.80	0.01
GFMCM-333	85.10	100.10	0.019	GFMCM-344	269.80	280.16	0.04
GFMCM-333	188.29	202.32	0.111	GFMCM-344	280.16	291.79	1.399
GFMCM-333	234.97	249.97	0.012	GFMCM-344	291.79	306.79	1.915
GFMCM-333	269.27	284.27	0.011	GFMCM-344	306.79	312.42	0.13
GFMCM-333	284.27	291.12	0.03	GFMCM-344	312.42	327.11	0.081
GFMCM-333	291.12	301.09	0.026	GFMCM-344	327.11	342.11	0.046
GFMCM-333	301.09	314.97	0.111	GFMCM-344	342.11	357.11	0.055
GFMCM-333	314.97	329.97	0.771	GFMCM-344	357.11	372.11	0.081
GFMCM-334	0.00	15.00	0.018	GFMCM-344	372.11	387.11	0.027
GFMCM-334	258.86	266.50	0.014	GFMCM-344	387.11	402.11	0.011
GFMCM-335	5.21	20.21	0.01	GFMCM-344	417.11	432.11	0.019
GFMCM-336	15.00	30.00	0.174	GFMCM-344	432.11	435.68	0.052
GFMCM-336	60.00	75.00	0.029	GFMCM-345	64.64	74.59	0.03
GFMCM-336	239.90	254.90	0.017	GFMCM-345	74.59	83.34	0.015
GFMCM-336	474.73	489.73	0.034	GFMCM-345	305.52	315.50	0.018
GFMCM-336	534.73	549.73	0.011	GFMCM-345	315.50	328.83	0.023
GFMCM-336	549.73	564.73	0.012	GFMCM-346	264.59	279.59	0.042
GFMCM-336	579.73	594.73	0.012	GFMCM-346	279.59	294.59	0.028
GFMCM-336	594.73	609.73	0.017	GFMCM-346	294.59	309.59	0.018
GFMCM-336	609.73	613.86	0.023	GFMCM-347	229.58	244.58	0.015
GFMCM-336	613.86	628.86	0.027	GFMCM-347	419.33	434.33	0.021
GFMCM-337	188.06	192.95	0.023	GFMCM-347	434.33	449.33	0.032
GFMCM-338	167.53	169.22	0.011	GFMCM-347	491.29	506.29	0.018
GFMCM-339	0.00	3.80	0.011	GFMCM-348	349.69	360.00	0.012
GFMCM-339	123.80	138.80	0.084	GFMCM-348	391.17	406.17	0.034
GFMCM-339	215.00	230.00	0.047	GFMCM-348	436.17	451.17	0.024
GFMCM-339	230.00	245.00	0.035	GFMCM-348	464.30	479.30	0.02
GFMCM-339	288.36	303.36	0.216	GFMCM-348	479.30	494.30	0.019
GFMCM-339	303.36	318.36	0.098	GFMCM-348	512.62	527.62	0.038
GFMCM-339	318.36	333.36	0.06	GFMCM-348	527.62	542.62	0.069
GFMCM-339	333.36	348.36	0.659	GFMCM-348	542.62	557.62	0.084
GFMCM-339	348.36	363.36	0.011	GF91-1	179.13	194.13	0.08
GFMCM-341	0.00	15.00	0.019	GF91-1	194.13	207.80	0.078
GFMCM-341	15.00	20.75	0.461	GF91-1	207.80	222.80	0.012
GFMCM-341	20.75	35.75	0.019	GF91-1	222.80	231.02	0.015
GFMCM-341	157.59	159.47	0.011	GF91-1	231.02	239.05	0.082
GFMCM-341	318.94	324.54	0.013	GF91-1	239.05	254.05	0.01
GFMCM-342	196.74	198.50	0.013	GF91-2	99.54	109.27	0.012
GFMCM-342	198.50	213.50	0.032	GF91-3	104.17	111.53	0.04
GFMCM-342	213.50	226.13	0.012	GF91-3	124.13	139.13	0.066
GFMCM-343	211.72	226.72	0.043	GF91-4	79.21	94.21	0.109
GFMCM-343	285.81	300.81	0.348	GF91-5	30.00	45.00	0.013
GFMCM-343	300.81	303.37	0.062	GF91-6	134.66	149.66	0.013
GFMCM-343	303.37	318.37	0.109	GF91-6	188.51	203.51	0.039
GFMCM-343	318.37	333.37	0.079	GF91-7	20.00	35.00	0.021
GFMCM-343	333.37	342.32	0.024	GF91-7	35.00	44.60	0.02
GFMCM-343	342.32	357.32	0.247	GF91-8	45.00	60.00	0.031
GFMCM-343	357.32	372.32	0.056	GF91-8	60.00	75.00	0.096

BHID	FROM	TO	AU_ORG
GF91-8	75.00	79.01	0.112
GF91-8	79.01	94.01	0.126
GF91-8	94.01	99.21	0.015
GMR-01	0.00	15.00	0.026
GMR-01	15.00	27.70	0.019
GMR-01	27.70	42.70	0.069
GMR-01	42.70	57.70	0.075
GMR-01	57.70	72.70	0.028
GMR-01	72.70	87.70	0.018
GMR-01	132.70	147.70	0.022
GMR-01	147.70	162.70	0.026
GMR-01	162.70	177.70	3.216
GMR-01	177.70	184.19	3.036
GMR-01	184.19	187.45	0.73
GMR-01	187.45	202.45	0.096
GMR-01	202.45	217.45	0.032
GMR-01	217.44	228.13	0.015
GMR-01	258.13	273.13	0.01
GMR-01	275.10	290.10	0.031
GMR-01	290.10	305.10	0.011
GMR-01	320.10	335.10	0.01
GMR-01	335.10	350.10	0.027
GMR-01	350.10	365.10	0.102
GMR-01	365.10	380.10	0.091
GMR-01	380.10	395.10	0.105
GMR-01	395.10	410.10	0.084
GMR-01	410.10	425.10	0.162
GMR-01	425.10	440.10	0.227
GMR-01	440.10	455.10	0.011
GMR-01	455.10	470.10	0.021
GMR-01	470.10	485.10	0.032
GMR-01	485.10	500.10	0.013
GMR-01	500.10	512.12	0.037
GMR-01	512.12	527.12	0.01
GMR-01	542.12	557.12	0.011
GMR-01	577.47	592.47	0.01
GMR-01	637.47	652.47	0.011
GMR-02	0.00	1.94	0.03
GMR-02	1.94	16.94	0.022
GMR-02	16.94	31.94	0.024
GMR-02	31.94	46.94	0.014
GMR-02	121.94	136.94	0.022
GMR-02	136.94	151.70	0.016
GMR-02	256.70	271.70	0.012
GMR-02	271.70	271.86	0.099
GMR-02	271.86	273.54	0.099
GMR-02	273.54	288.54	0.013
GMR-03	83.54	98.54	0.01
GMR-04	45.00	60.00	0.017
GMR-04	172.32	180.01	0.01
GMR-04	180.01	195.01	0.011
GMR-04	225.01	240.01	0.014
GMR-04	256.54	271.54	0.017
GMR-04	294.94	309.94	0.016
GMR-04	309.94	324.94	0.031
GMR-04	324.94	339.94	0.075
GMR-04	339.94	354.94	0.034
GMR-04	354.94	366.71	0.083
GMR-04	366.71	381.71	0.042
GMR-04	381.71	396.71	0.011
GMR-05	469.63	484.63	0.056
GMR-06	274.36	289.36	0.01
GMR-06	304.36	319.36	0.019
GMR-06	319.36	326.15	0.011
GMR-06	326.15	341.15	0.022
GMR-06	356.15	371.15	0.014
GMR-06	371.15	386.15	0.062
GMR-06	386.15	399.88	0.021
GMR-06	399.88	414.88	0.039
GMR-06	414.88	425.41	0.042
GMR-06	425.41	440.41	0.023
GMR-06	440.41	455.41	0.014
GMR-06	455.41	462.25	0.018
GMR-06	462.25	477.25	0.01
GMR-06	477.25	492.25	0.011
GMR-06	492.25	507.25	0.054
GMR-06	507.25	522.25	0.026
GMR-06	522.25	537.25	0.022
GMR-06	539.19	554.19	0.055
GMR-06	599.19	606.92	0.013
GMR-06	636.92	651.92	0.01
GMR-06	651.92	666.92	0.017
GMR-06	666.92	667.16	0.011
GMR-06	667.16	682.16	0.012
GMR-07	0.00	15.00	0.012
GMR-07	15.00	30.00	0.015
GMR-07	141.20	156.20	0.018
GMR-07	156.20	163.48	0.015
GMR-07	203.28	212.85	0.016
GMR-07	267.13	282.13	0.022
GMR-07	282.13	297.13	0.013
GMR-07	297.13	312.13	0.023
GMR-07	405.00	420.00	0.012
GMR-07	420.00	435.00	0.017
GMR-07	437.31	452.31	0.016
GMR-07	550.11	552.82	0.01
GMR-07	552.82	567.82	0.013
GMR-07	567.82	582.82	0.014
GMR-08	0.00	1.49	0.06
GMR-08	1.49	16.49	0.055
GMR-08	16.49	31.49	0.093
GMR-08	31.49	46.49	0.077

BHID	FROM	TO	AU_ORG
GMR-08	46.49	61.49	0.018
GMR-08	61.49	76.49	0.022
GMR-08	76.49	91.49	0.016
GMR-08	91.49	106.49	0.027
GMR-08	106.49	121.49	0.022
GMR-08	121.49	136.49	0.019
GMR-08	136.49	151.49	0.025
GMR-08	151.49	166.49	0.019
GMR-08	264.23	279.23	0.022
GMR-08	279.23	294.23	0.02
GMR-08	324.23	339.23	0.018
GMR-08	339.23	354.23	0.036
GMR-08	354.23	369.23	0.039
GMR-08	369.23	372.28	0.049
GMR-08	372.28	387.28	0.014
GMR-08	402.28	417.28	0.013
GMR-08	557.96	572.96	0.02
GMR-08	572.96	576.91	0.011
GMR-08	576.91	591.91	0.012
GMR-08	591.91	606.91	0.07
GMR-08	606.91	621.91	0.016
GMR-08	621.91	636.91	0.019
GMR-08	636.91	651.91	0.01
GMR-08	651.91	666.91	0.013
GMR-08	789.88	795.00	0.023
GMR-09	45.27	60.27	0.064
GMR-09	60.27	75.27	0.109
GMR-10	194.94	209.94	0.014
GMR-15	73.14	88.14	0.014
GMR-20	52.54	67.54	0.023
GMR-20	67.54	82.54	0.018
GMR-20	82.54	97.54	0.037
GMR-20	157.54	172.54	0.01
GMR-21	0.00	2.04	0.088
GMR-21	2.04	17.04	0.024
GMR-21	19.77	21.77	0.025
GMR-21	21.77	36.77	0.013
GMR-21	36.77	51.77	0.015
GMR-21	51.77	66.77	0.015
GMR-21	111.69	126.69	0.014
GMR-21	126.69	141.69	0.022
GMR-21	141.69	156.69	0.018
GMR-21	156.69	169.81	0.01
GMR-21	193.64	208.64	0.01
GMR-21	208.64	223.64	0.026
GMR-21	223.64	238.64	0.03
GMR-21	253.64	268.64	0.059
GMR-21	268.64	283.64	0.111
GMR-21	283.64	298.64	0.013
GMR-21	313.64	328.64	0.02
GMR-21	328.64	343.64	0.104

BHID	FROM	TO	AU_ORG
GMR-21	343.64	348.50	0.056
GMR-21	348.50	363.50	0.034
GMR-21	363.50	378.50	0.019
GMR-21	438.50	453.50	0.01
GMR-21	513.50	528.50	0.022
GMR-22	37.05	50.01	0.017
GMR-22	50.01	65.01	0.011
GMR-22	155.01	158.16	0.041
GMR-22	158.16	173.16	0.021
GMR-22	173.16	188.16	0.048
GMR-22	188.16	203.16	0.044
GMR-22	203.16	218.16	0.032
GMR-22	218.16	231.67	0.053
GMR-23	0.00	15.00	0.014
GMR-23	15.00	30.00	0.037
GMR-23	30.00	45.00	0.024
GMR-23	45.00	50.46	0.023
GMR-24	336.92	351.92	0.013
GMR-24	430.37	445.37	0.029
GMR-24	445.37	449.57	0.03
GMR-24	449.57	464.57	0.011
GMR-25	395.75	410.75	0.01
GMR-25	410.75	412.10	0.015
GMR-25	412.10	424.90	0.017
GMR-25	424.90	439.90	0.013
GMR-25	439.90	454.90	0.014
GMR-25	469.90	484.90	0.035
GMR-25	484.90	499.90	0.013
GMR-25	514.90	529.90	0.011
GMR-26	539.14	554.14	0.011
GMR-27	208.77	223.77	0.027
GMR-27	223.77	238.77	0.01
GMR-34	0.00	5.88	0.023
GMR-34	5.88	20.88	0.025
GMR-34	48.74	63.74	0.119
GMR-34	63.74	78.74	0.038
GMR-34	382.15	397.15	0.01
GMR-34	555.21	570.21	0.011
GMR-34	570.21	585.21	0.022
GMR-34	585.21	600.21	0.049
GMR-34	600.21	615.21	0.02
M-1	151.78	166.78	0.039
M-1	181.78	185.00	0.012
M-10	38.13	53.13	0.127
M-10	53.13	68.13	0.088
M-10	68.13	69.00	0.142
M-10	80.00	92.65	0.146
M-10	92.65	94.00	0.133
M-10	105.00	120.00	0.118
M-10	120.00	128.38	0.063
M-10	128.38	134.00	0.045

BHID	FROM	TO	AU_ORG
M-10	140.00	155.00	0.032
M-10	155.00	162.82	0.031
M-10	162.82	177.82	0.015
M-10	207.82	222.82	0.018
M-10	222.82	233.25	0.012
M-10	233.25	248.25	0.054
M-10	248.25	255.00	0.023
M-10	260.00	275.00	0.101
M-11	40.00	55.00	0.016
M-11	55.00	70.00	0.03
M-11	70.00	85.00	0.317
M-11	152.30	167.30	0.018
M-11	167.30	168.39	0.022
M-12	210.00	215.00	0.036
M-13	150.39	152.72	0.014
M-13	152.72	165.54	0.03
M-13	165.54	180.54	0.012
M-13	180.54	185.64	0.044
M-13	185.64	200.13	0.063
M-13	200.13	215.00	0.068
M-14	0.00	2.44	0.021
M-14	2.44	17.44	0.074
M-14	17.44	32.44	0.047
M-14	32.44	47.44	0.072
M-14	47.44	51.52	0.072
M-14	51.52	66.52	0.092
M-14	66.52	81.52	0.057
M-14	81.52	96.52	0.011
M-14	96.52	111.52	0.059
M-14	111.52	126.52	0.045
M-14	126.52	141.52	0.061
M-14	141.52	156.52	0.082
M-14	156.52	171.52	0.147
M-14	171.52	186.52	0.012
M-14	186.52	201.52	0.023
M-14	201.52	216.52	0.01
M-14	326.91	341.91	0.069
M-14	341.90	345.04	0.011
M-14	390.04	404.54	0.036
M-14	404.54	419.54	0.595
M-14	419.54	434.54	1.35
M-14	434.54	440.00	0.174
M-15	2.12	17.12	0.01
M-15	17.12	32.12	0.063
M-15	32.12	47.12	0.022
M-15	47.12	62.12	0.019
M-15	121.65	136.65	0.042
M-15	136.65	151.65	0.019
M-15	151.65	166.65	0.024
M-15	166.65	181.65	0.019
M-15	181.65	196.65	0.013
M-15	196.65	211.65	0.02
M-15	211.65	226.65	0.024
M-15	226.65	241.65	0.022
M-15	241.65	256.65	0.012
M-15	271.65	286.65	0.018
M-15	286.65	301.65	0.019
M-15	301.65	316.65	0.02
M-15	316.65	331.65	0.034
M-15	331.65	346.65	0.011
M-15	346.65	361.65	0.015
M-15	361.65	376.65	0.017
M-15	376.65	391.65	0.015
M-15	391.65	406.65	0.017
M-15	406.65	421.65	0.014
M-15	421.65	436.65	0.187
M-15	436.65	451.65	0.015
M-15	451.65	466.65	0.031
M-15	466.65	481.65	0.073
M-15	481.65	496.65	0.046
M-15	496.65	511.65	0.05
M-15	511.65	526.65	0.039
M-15	526.65	541.65	0.044
M-15	541.65	556.65	0.055
M-15	556.65	571.65	0.056
M-15	571.65	574.82	0.028
M-15	574.82	580.00	0.025
M-16	55.00	58.24	0.044
M-16	58.24	73.24	0.036
M-17	0.00	10.10	0.022
M-17	10.10	25.10	0.012
M-17	25.10	40.10	0.016
M-17	115.10	130.10	0.021
M-17	130.10	140.00	0.019
M-2	138.15	142.99	0.033
M-2	142.99	149.79	0.047
M-3	132.02	143.54	0.01
M-4	188.22	196.74	0.017
M-4	196.74	211.74	0.027
M-4	211.74	226.74	0.015
M-4	226.74	241.74	0.016
M-6	166.07	181.07	0.015
M-7	212.99	227.99	0.058
M-7	227.99	242.99	0.122
M-7	242.99	255.04	0.017
M-7	255.04	270.04	0.016
M-7	270.04	282.98	0.024
M-8	150.83	165.83	0.015
M-8	165.83	180.83	0.02
M-8	180.83	195.83	0.026
M-8	195.83	210.83	0.021
M-8	210.83	225.83	0.027

BHID	FROM	TO	AU_ORG
M-8	225.83	240.83	0.022
M-8	240.83	255.83	0.018
M-8	255.83	266.50	0.031
M-8	266.50	281.50	0.036
M-8	281.50	283.80	0.027
M-8	283.80	290.93	0.01
M-8	290.93	305.93	0.014
M-8	305.93	307.30	0.019
VE90-4	30.00	45.00	0.01
VE90-4	45.00	60.00	0.031
VE90-5	30.00	45.00	0.099
VE90-5	45.00	60.00	0.081
VE90-5	60.00	75.00	0.013
VE9-2	15.00	30.00	0.037
VE9-2	30.00	41.00	0.067
VE9-2	55.00	70.00	0.039
VE9-3	75.00	90.00	0.017
VE-2	30.00	45.00	0.024
VE-2	55.00	70.00	0.649
VE-2	70.00	80.00	0.261

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Wed Feb 6, 2008
AMENDED PRELIMINARY ASSESSMENT GEMFIELD & MCMAHON RIDGE D GOLDFIELD DISTRICT, NEVADA

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Mon Sep 25, 2006
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File: http://www.metallicventuresgold.com/i/pdf/Goldfield Preliminary Assessment 0925 200
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695 KB, approx. 2 minutes, 10 seconds at 56.6Kbps

Wed Jul 13, 2005
Technical Report NI 43-101 Goldfield

File: http://www.metallicventuresgold.com/i/pdf/Goldfield 43-101 Report (FINAL).pdf
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2004 Annual Information Form (AIF)

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For more information, send questions and comments to info@metallicventuresgold.com
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